

# PS-LX5/LX5C



PS-LX5:

*US Model  
Canadian Model  
AEP Model  
UK Model  
E Model*

PS-LX5C:

*US Model*

## STEREO TURNTABLE SYSTEM

### SPECIFICATIONS

#### Turtable

Platter	31 cm (12 $\frac{1}{4}$ in.), aluminum-alloy diecast
Motor	Linear torque BSL (brushless and slotless) motor
Drive system	Direct drive
Control system	Quartz lock control, magnedisc servo control system

#### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

#### ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET UNE MARQUE SUR LES DIAGRAMMES SCHÉMATIQUES, LES VUES EXPLOSÉES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

Speed	33 $\frac{1}{3}$ rpm, 45 rpm
Starting characteristics	Comes to nominal speed within a $\frac{1}{2}$ revolution (33 $\frac{1}{3}$ rpm)
Wow and flutter	0.02% (WRMS)* 0.025% (WRMS) $\pm 0.04\%$ (DIN)
Signal-to-noise ratio	78 dB (DIN-B)
Load characteristics	0% up to 100 g stylus force (at lead-in groove of a record)
Speed deviation	Within $\pm 0.003\%$
Automatic system	Lead-in, return, reject, repeat, record size selection

#### Tonearm

Type	Statically balanced
Pivot-to-stylus length	216.5 mm (8 $\frac{5}{8}$ in.)
Overhang	16.5 mm ( $2\frac{1}{32}$ in.)
Stylus force adjustment range	0 - 3 g
Cartridge shell weight	PS-LX5 (US, Canadian model): 5.2 g (SH-151) PS-LX5C (US model): 4.7 g (SH-94)
Cartridge weight range (including a cartridge shell)	7.4-11.7 g 10.9-15.2 g [with extra weight for the PS-LX5 (US, Canadian model)]

- Continued on page 2 -



MICROFILM

**SONY**  
SERVICE MANUAL

**Cartridge XL-200 [supplied only with PS-LX5 (AEP, UK, E model)]**

Type	Moving magnet type
Frequency response	10 Hz to 30 kHz
Channel separation	25 dB at 1 kHz
Output voltage	3 mV at 1 kHz, 5 cm/sec.
Load impedance	50 to 100 kilohms
Tracking force	1 to 2 g (1.5 g recommended)
Stylus	Sony ND-200G (conical 0.6 mil diamond)
Weight	8.2 g

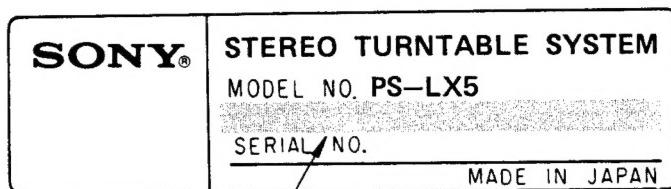
**Cartridge VL-5 [supplied only with the PS-LX5C (US model)]**

Type	Moving magnet type
Frequency response	10 Hz to 20 kHz
Channel separation	20 dB at 1 kHz
Output voltage	3.5 mV at 1 kHz, 5 cm/sec., 45°
Load impedance	47 to 100 kilohms
Tracking force	1.5 to 2.5 g (2 g recommended)
Stylus	Sony ND-5G (conical 0.6 mil diamond)
Weight	5.0 g

**General**

Power requirements	AEP model: 220 V ac, 50/60Hz UK model: 240 V ac, 50/60Hz E model: 110-120 or 220-240 V ac adjustable 50/60 Hz
Power consumption	9 W
Dimensions	Approx. 430 × 105 × 355 mm (w/h/d) (17 × 4 1/4 × 14 in.)
Weight	including projecting parts and controls Approx. 6.3 kg (13 lbs 14 oz), net Approx. 7.6 kg (16 lbs 12 oz), in shipping carton

\* This new measuring method concerns only the turntable assembly, including the platter. It excludes wow and flutter caused by the tonearm, the cartridge, or the record. Measured by obtaining signal from magnetic pick-up head.

**MODEL IDENTIFICATION****— Specification Label —**

- US, Canadian model: AC 120 V 60 Hz 9W  
 AEP model: AC 220V~50/60 Hz 9W  
 E model: AC 110-120 V, 220-240 V~50/60 Hz 9W  
 UK model: AC 240 V~50/60 Hz 9W

### Handling Precautions for MOS ICs

Generally, the insulation resistance of the oxide layer in MOS IC structures is very high, and the oxide layer is very thin. Because of this, it is possible that the static voltages usually present on clothes and the human body will be enough to generate a potential difference across the insulator, high enough to cause a breakdown of the insulating layer.

The following precautions should be taken while handling these ICs.

(Particular care should be taken under conditions of low humidity.)

#### Precautions in Replacing MOS ICs

1. Store new ICs by inserting them into a urethane-polyester cushion (which is somewhat conductive), or wrapping it in aluminum foil, so that all the pins are at the same potential.  
(The ICs should be stored in that manner until mounted on the circuit board.)

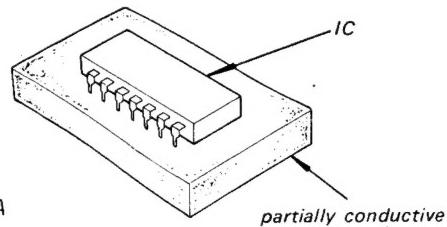


Fig. A

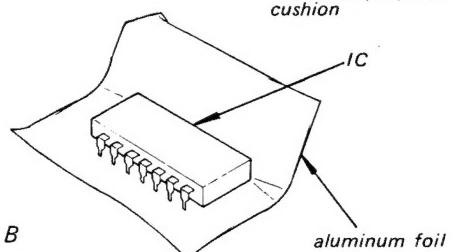


Fig. B

2. Check the soldering iron for possible power-line leakage current. Make sure that there is no leakage path by connecting an ohmmeter to the tip of the soldering iron and the plug as shown in Fig. C. If there is a leakage path, use some other soldering iron.

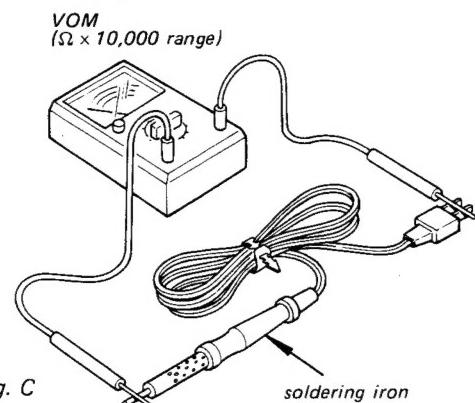


Fig. C

3. Equalize any potential difference between the clothes, the tools in use, the work bench, the set being worked on, and the packaged IC by touching them all in succession with the hands or a conductive wire or tool.
4. The following are effective methods for handling ICs that remove the potential difference across the oxide layer.
  - Use a paper clip modified by soldering in a wire braid insert.

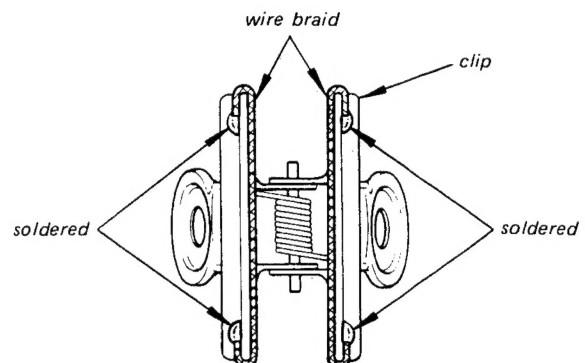


Fig. D

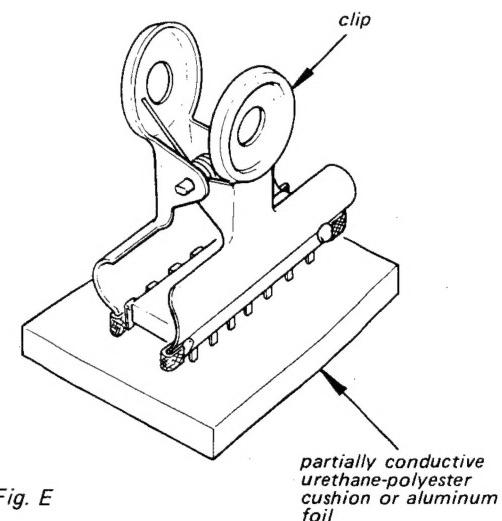


Fig. E

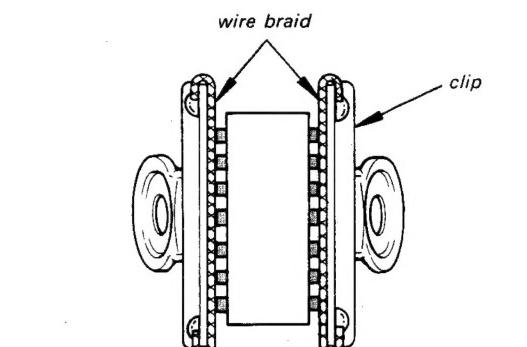


Fig. F

- Take a short length of fine bare wire and wind it around the IC so that it shorts all the pins of the IC, while it is still in the urethane-polyester cushion or aluminum foil. This ensures that all the pins are at the same potential.

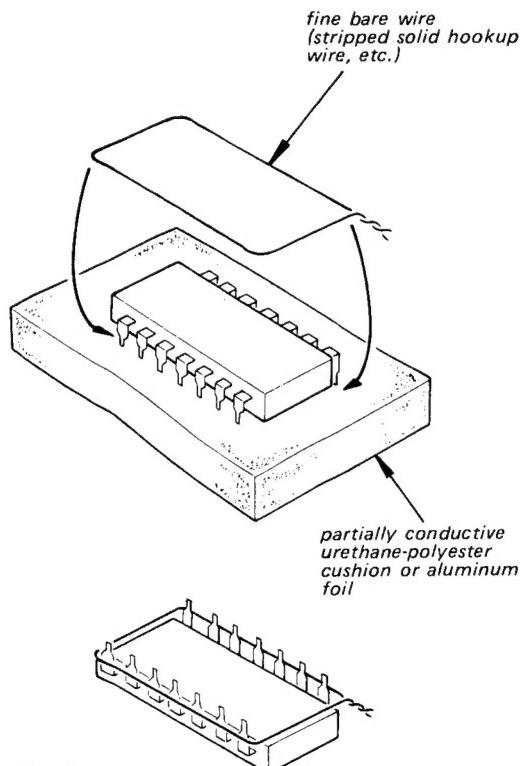


Fig. G

- When it is necessary to handle the IC with the fingers, do not touch any pin, and hold the IC at the ends of its plastic-package case as shown in Fig. H.

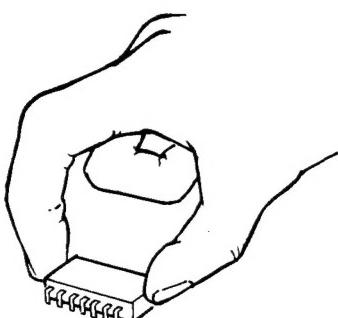


Fig. H

## 5. Method of Mounting

Insert the IC while holding it with the modified clip, and solder all the pins with the clip still shorting the pins. (Similarly, solder all the pins while the bare shorting wire is still wound around them.). Remove the clip or the bare shorting wire only after all the pins have been soldered.

## Precaution while Checking C-MOS ICs

The C-MOS ICs (Complementary MOS) are MOS ICs that have their output sections made up of N-channel and P-channel push-pull stages to increase their speed of operation. If the output terminal of these ICs comes into contact with B+ or B- voltage, then the FET which is ON at that time will either become shorted or open.

This is valid for all the output sections that are connected together by the interconnections. Even the circuits that are physically separated (and not on the same board) can be destroyed simultaneously.

### Example:

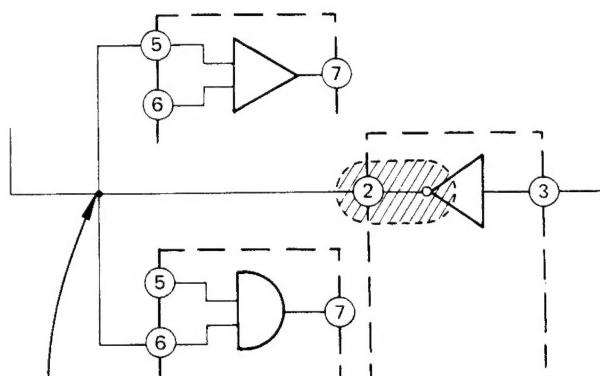
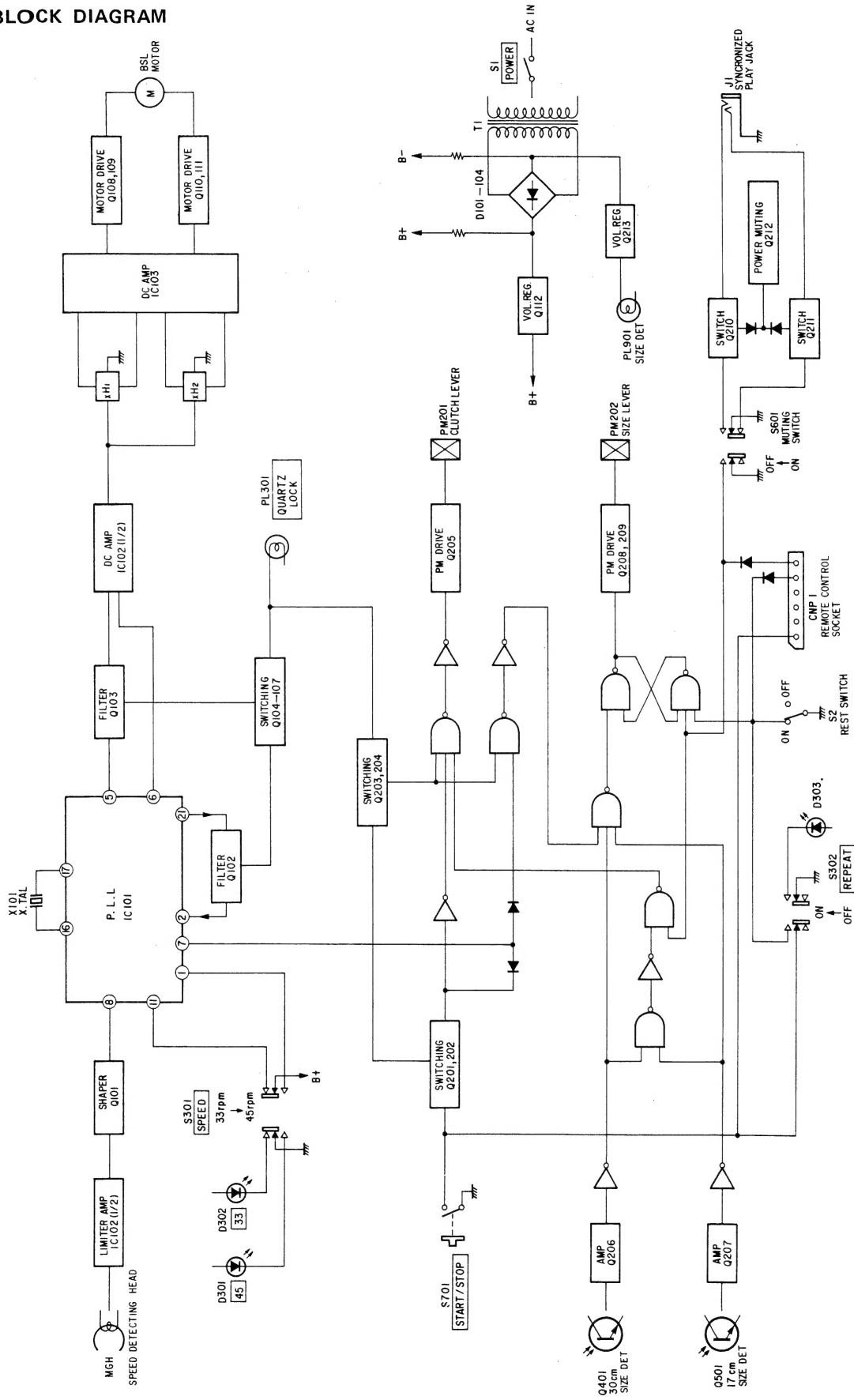


Fig. I

## SECTION 1

## OUTLINE

## 1-1. BLOCK DIAGRAM



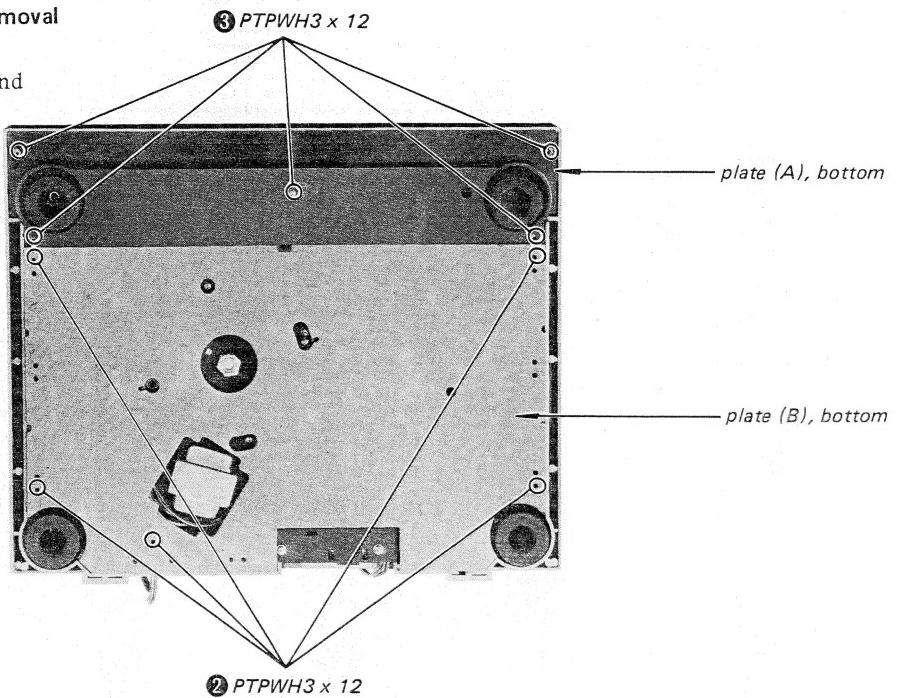
## SECTION 2

### DISASSEMBLY AND ASSEMBLY

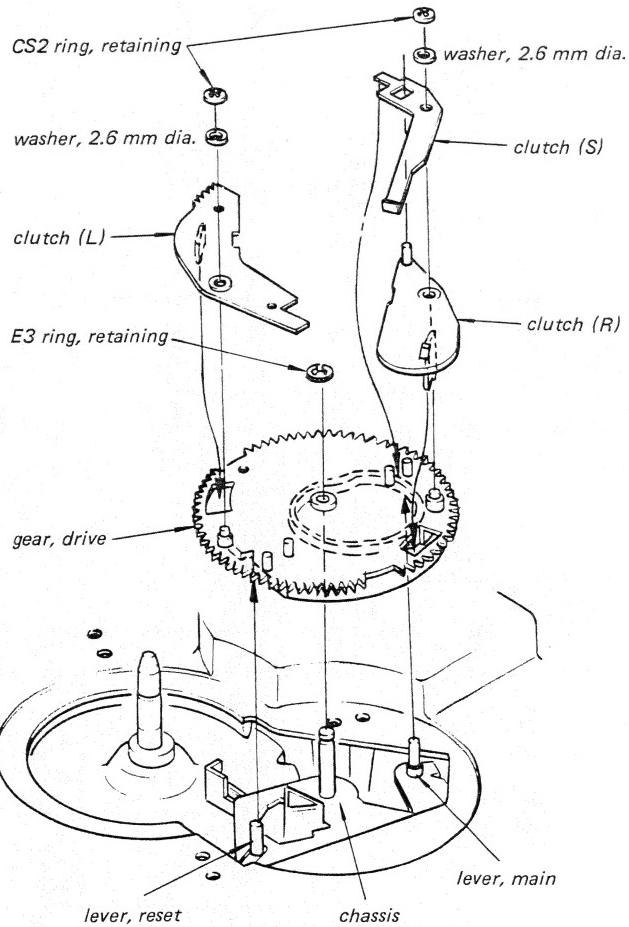
Note: Follow the disassembly procedure in the numerical order given.

#### Bottom Plate (A) / (B) Removal

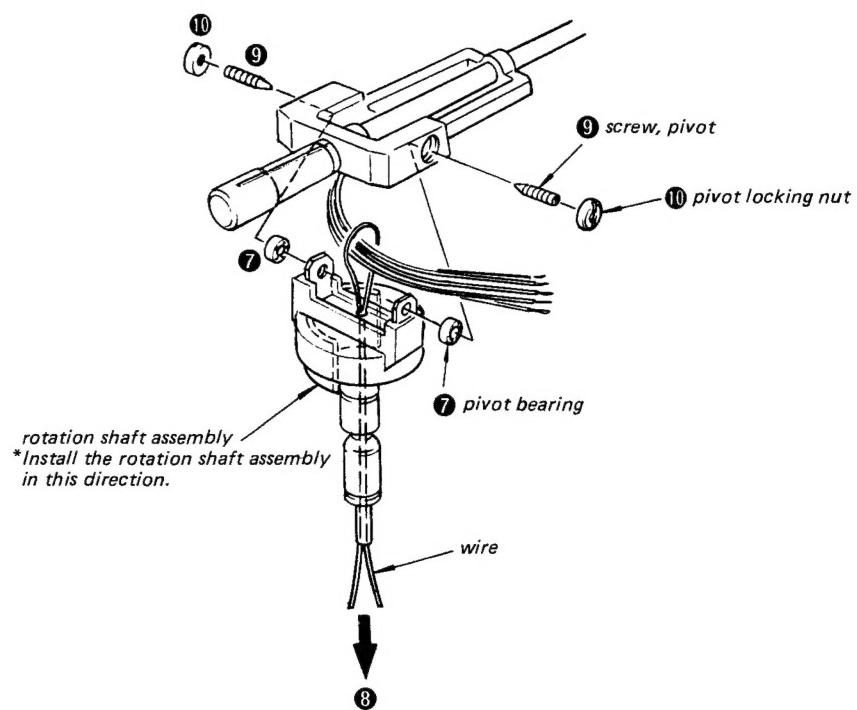
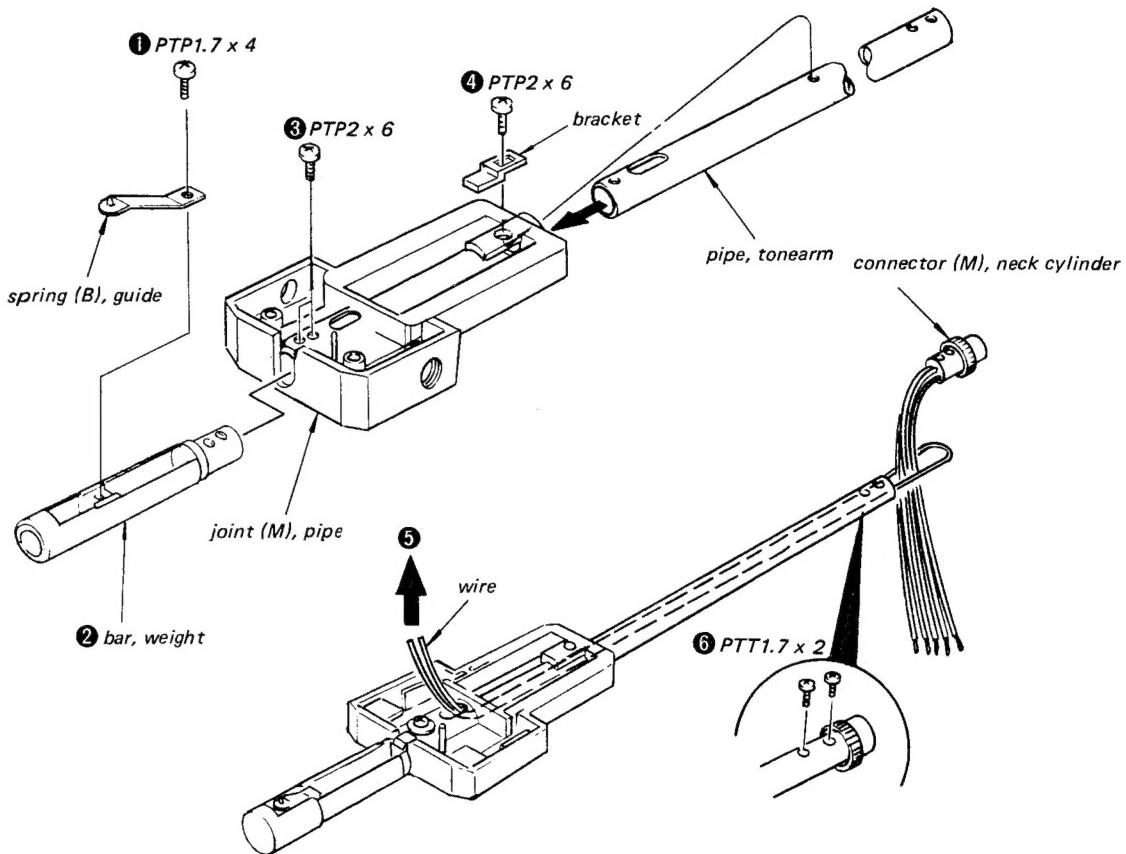
- ① Remove the turntable and the turntable sheet.



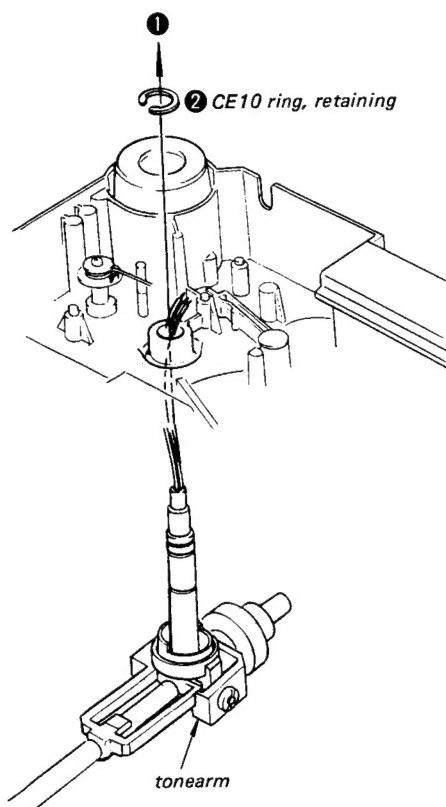
#### Drive Gear Assembly



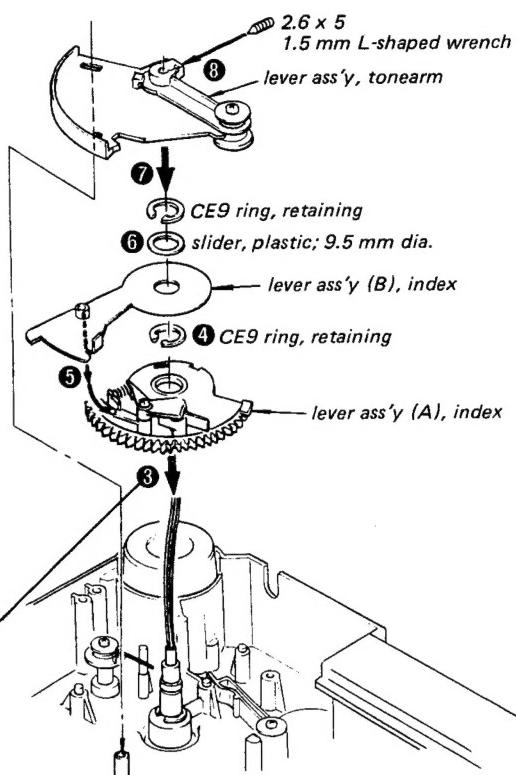
## Tonearm Assembly (1)



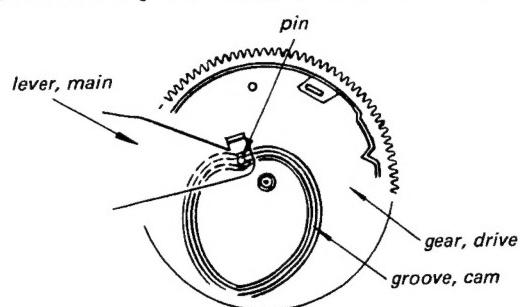
Tonearm Assembly (2)



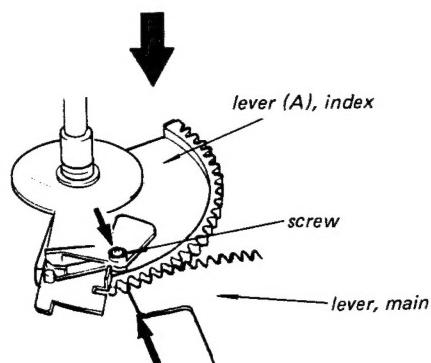
Arm Lever Ass'y Installation



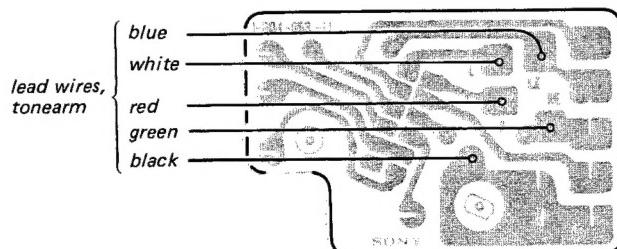
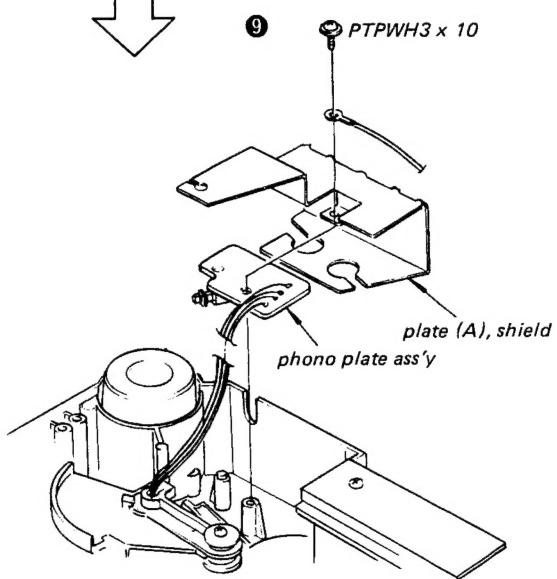
③ Position of parts of index lever (A) assembly



Rotate the drive gear so that pin of main lever is positioned as illustrated above.



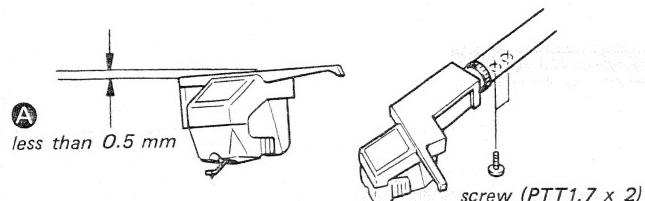
Put the center of the screw of the index lever (A) on the edge of the gear of main lever.



## SECTION 3 ADJUSTMENTS

### Shell's Horizontal Balance Adjustment

Loosen the screw on the neck cylinder so that the clearance **A** is less than 0.5 mm.



### Stylus Drop-point Adjustment

1. Remove the rubber cap.
2. Make sure that the stylus drops on the specified point of the test record.  
test record: YFSC-16

Record size	Count of drop-point
30 (12")	2 to 19

3. If necessary, insert a screwdriver into the hole and adjust the drop-point by turning the adjustment screw.

To change the drop-point inward:

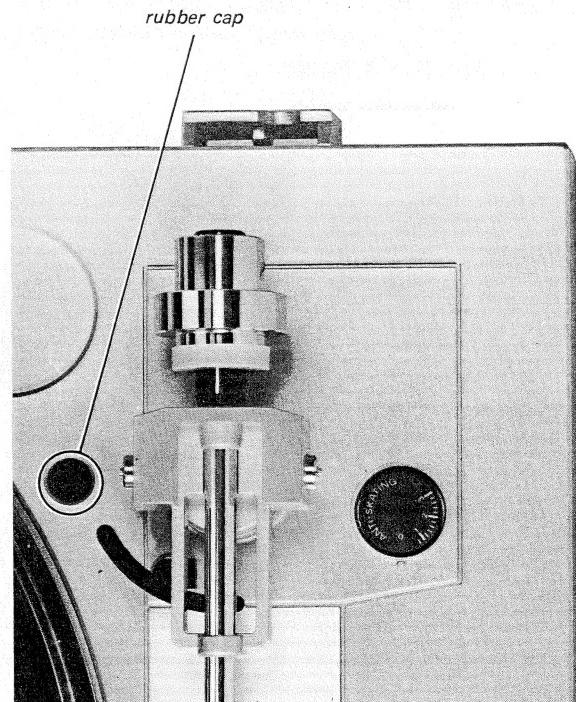
Turn the adjustment screw slightly clockwise.  
(The count of the drop-point will be larger.)

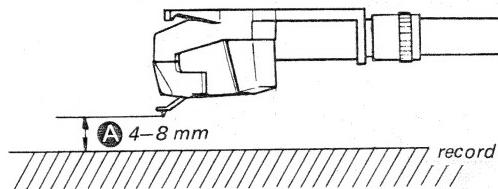
To change the drop-point outward:

Turn the adjustment screw slightly counter-clockwise. (The count of the drop-point will be smaller.)

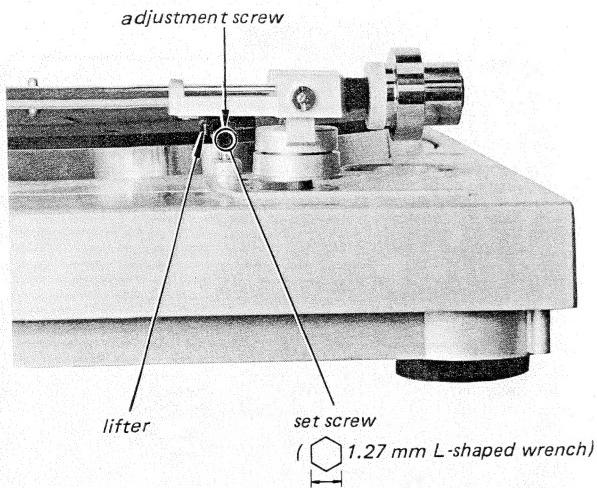
**Note 1:** The adjustment screw can be turned with a hexagonally shaped pencil.

**Note 2:** Once it is properly adjusted with a 30 cm (12") record, the drop-point will be correct for 17 cm (7") records.

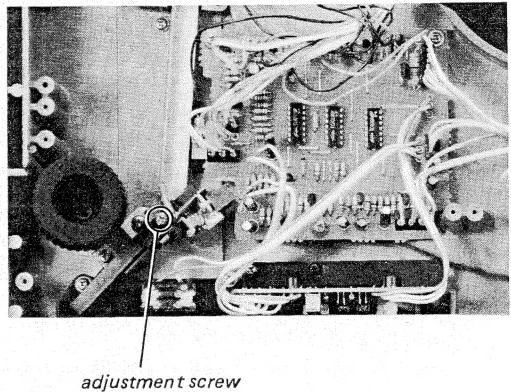


**Stylus Height Adjustment****• During auto play**

1. Put the record on the turntable and lower the tonearm by pressing Up/Down button [ ▲ ▼ ] and then press START/STOP button for record play.
2. When the tonearm reaches the end of the record, turn the POWER switch off before it returns to the arm rest and stop the rotation of the turntable by hand.
3. Make sure that the clearance **A** is 4 – 8 mm ( $\frac{5}{32}$  –  $\frac{5}{16}$ "). If necessary, loosen the set screw and adjust the lifter height.

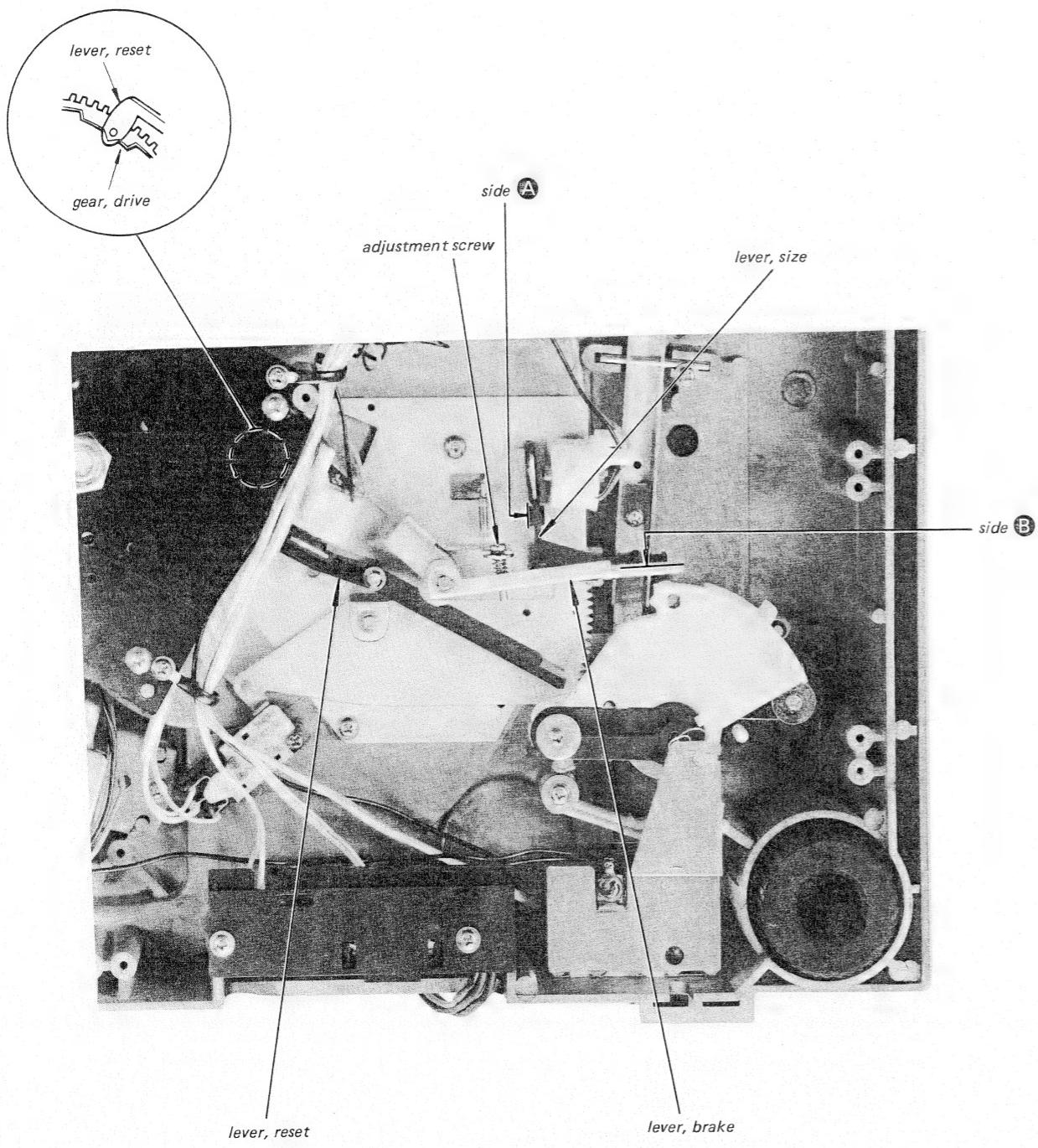
**• During manual play**

1. Lift the tonearm by pressing Up/Down button [ ▲ ▼ ] and then press START/STOP button for record play.
2. When the tonearm reaches the lead-in groove, turn the POWER switch off.
3. Make sure that the clearance **A** is 4 – 8 mm ( $\frac{5}{32}$  –  $\frac{5}{16}$ "). If necessary, turn the adjustment screw on the seesaw lever (B).

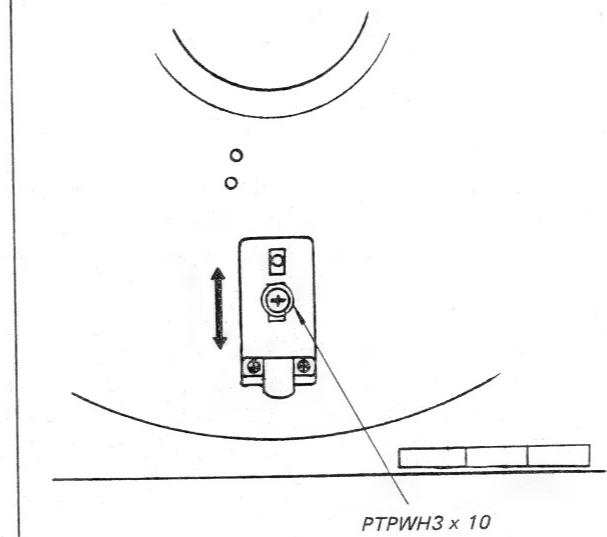


**Brake Lever Position Adjustment (unplug the power cord.)**

1. Reset the reset lever, so that the pin of the reset lever is in the reset hole of the drive gear.
2. By turning the adjustment screw, adjust the brake lever position so that:
  - 1) The rubber of the size lever slightly touches side **A** of the chassis.
  - 2) Side **B** of the brake lever slightly touches the pin of the size lever.

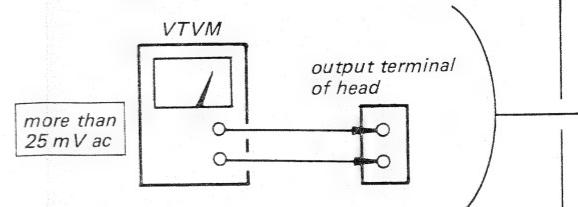


— 11 —

**— with the turntable removed —****Speed Detecting Head Output Level Adjustment Setting:**

POWER switch: ON

1. Adjust the position of the head by moving it back and forth after loosening the screw (PTPWH 3 x 10) so that the VTVM reading is more than 25 mV ac at 33 1/3 rpm.



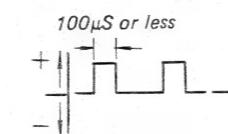
2. Make sure that the head does not touch the turntable and tighten the screws securely.

**Note:** The clearance between the magnet coated rim and the speed-detecting head should be more than 0.3 mm.

**Speed Adjustment****Setting:**

POWER switch: ON

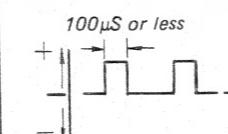
1. Set the SPEED to 45 rpm.
2. Adjust RV102 for specified waveform on the oscilloscope as shown below.



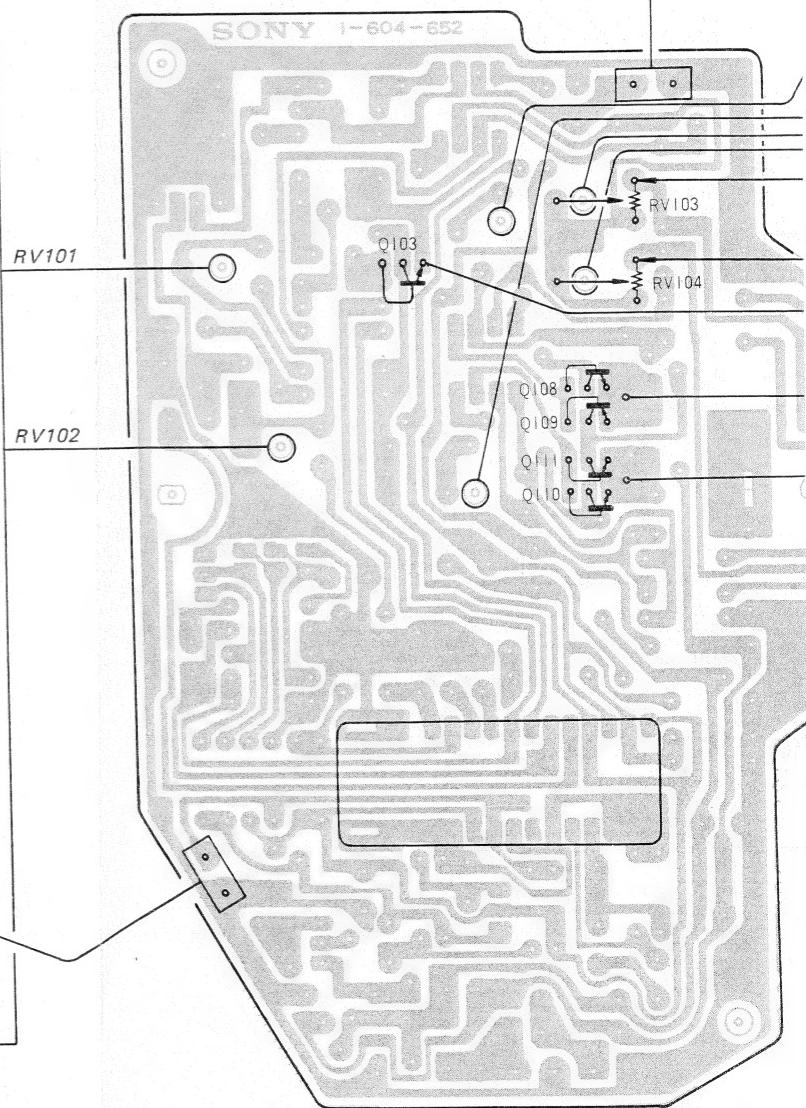
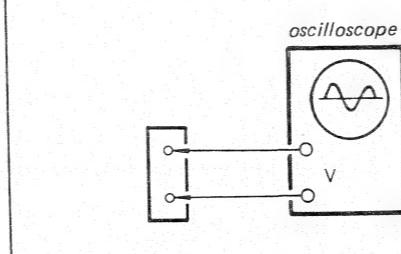
**Note:** The waveform may appear to negative side.

3. Set the SPEED to 33 rpm.

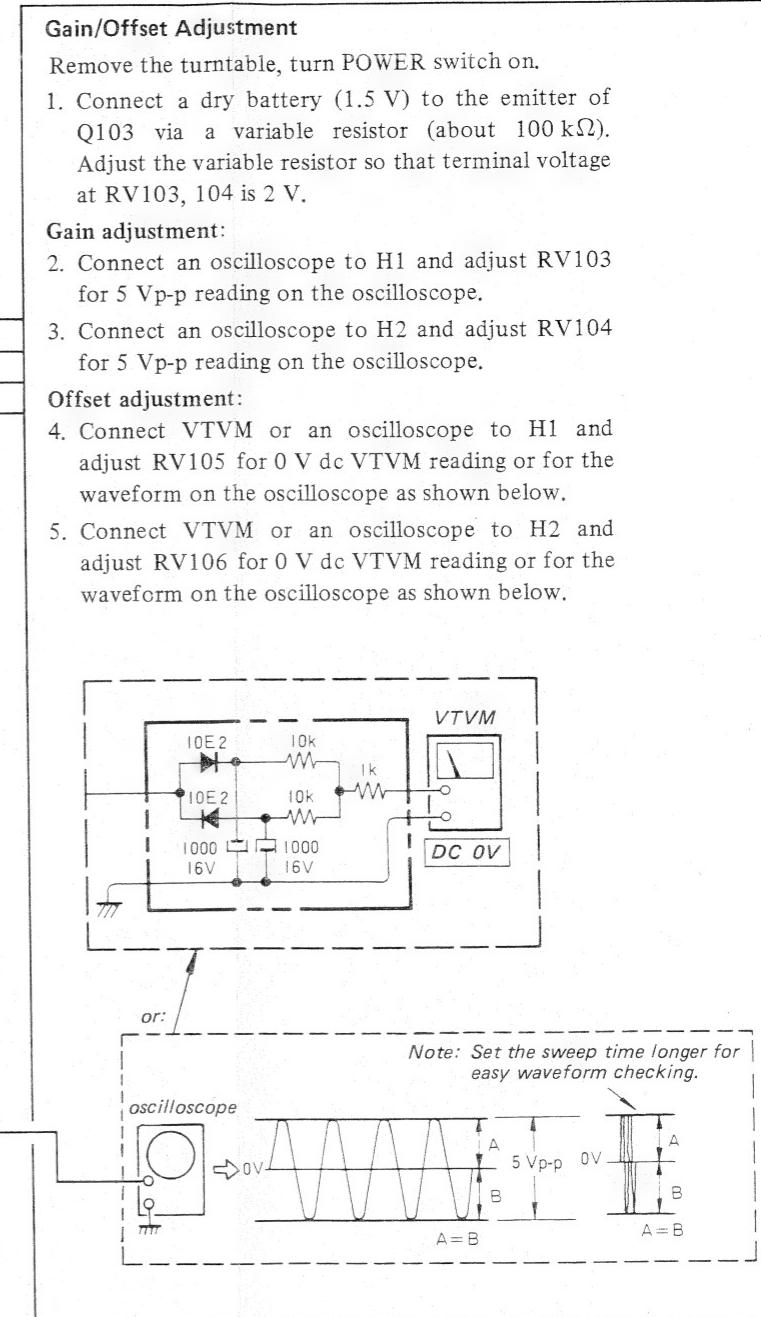
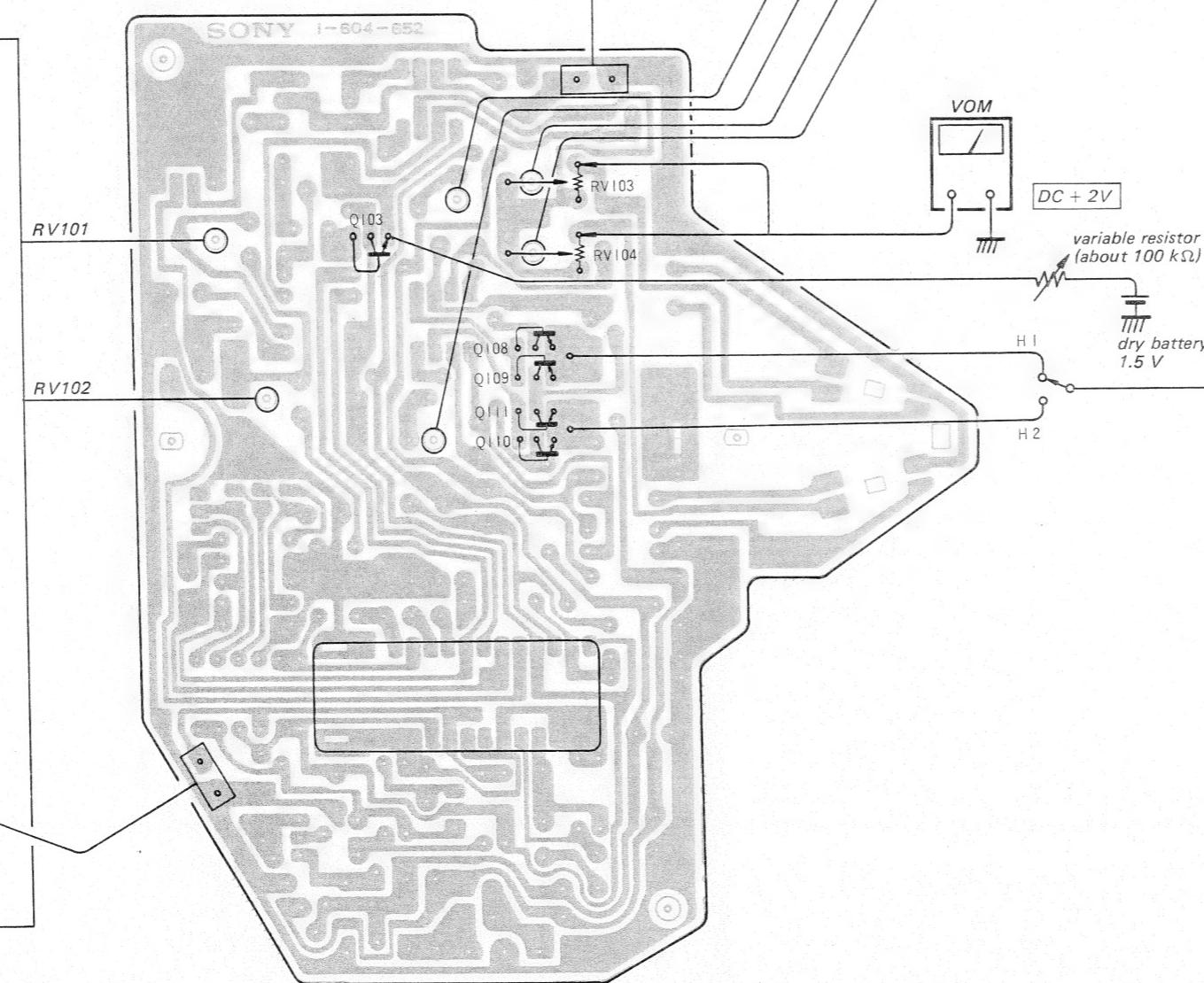
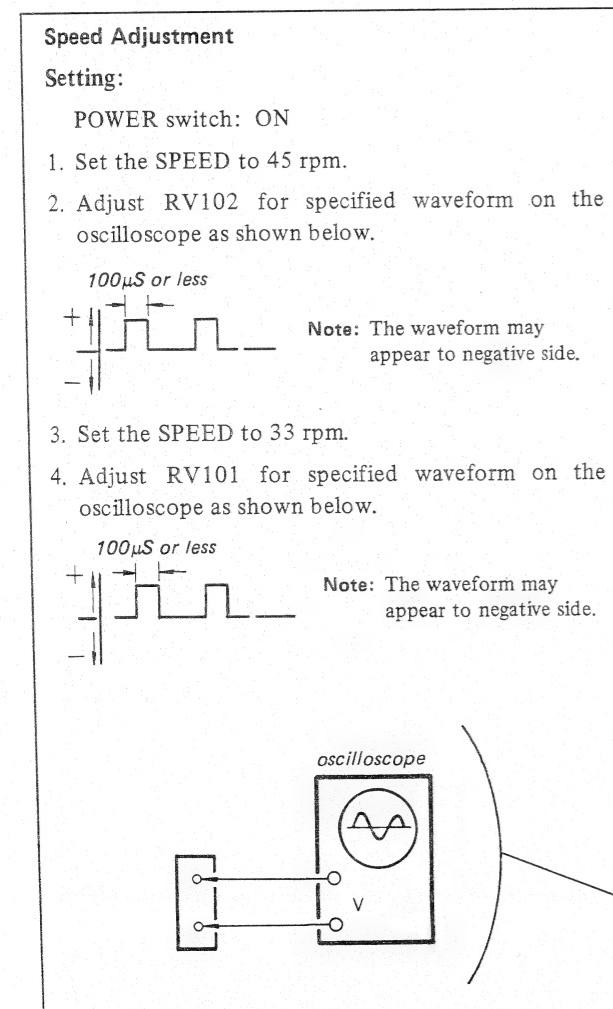
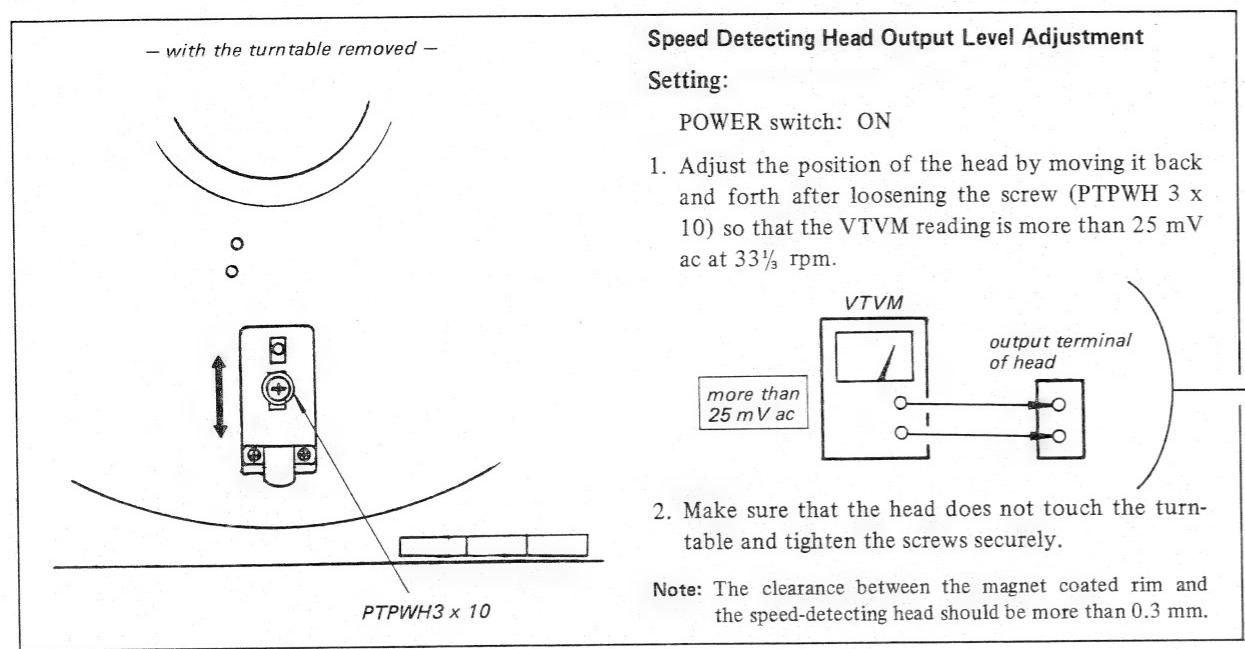
4. Adjust RV101 for specified waveform on the oscilloscope as shown below.



**Note:** The waveform may appear to negative side.

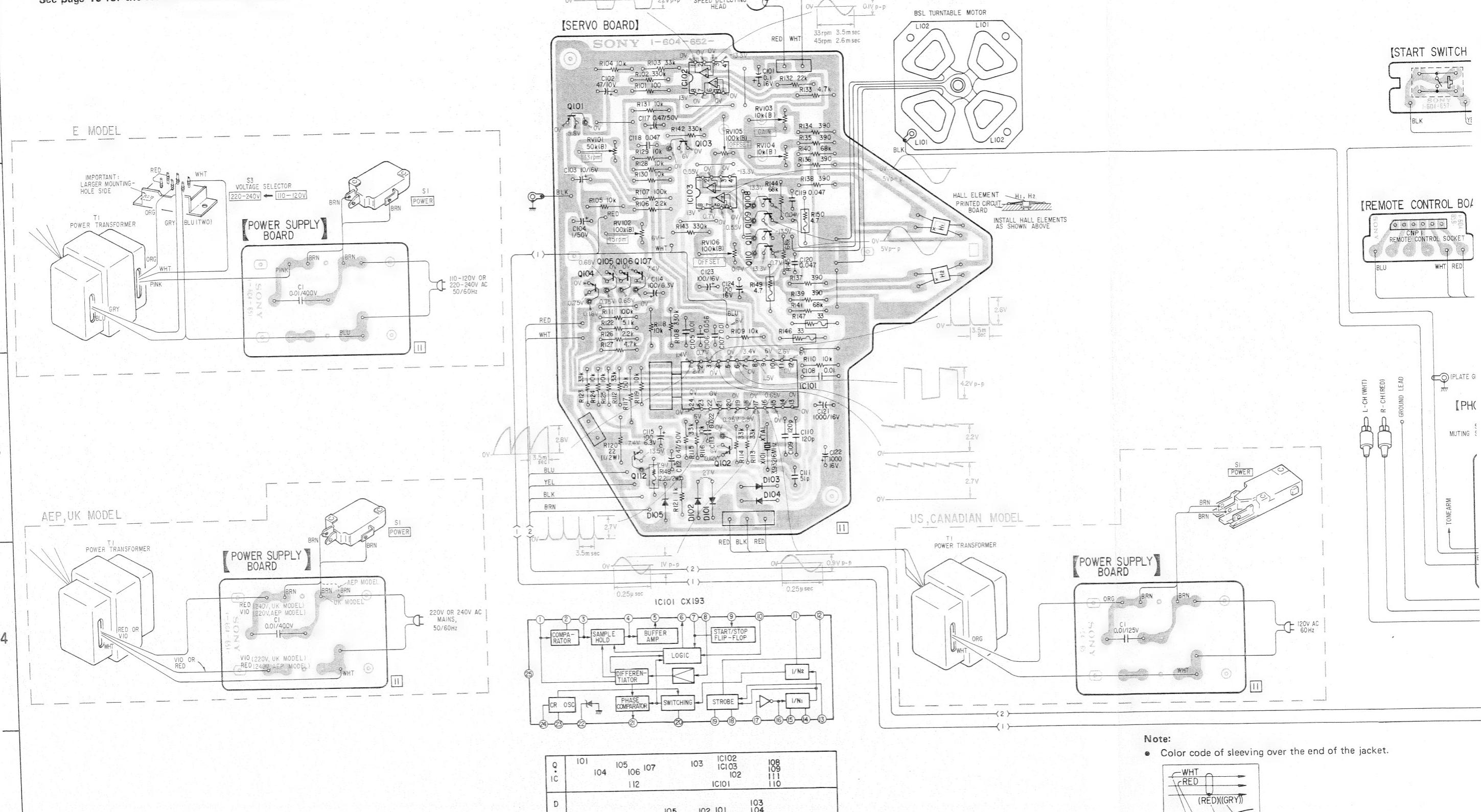


— 12 —



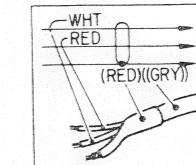
#### 4-1. MOUNTING DIAGRAM

See page 19 for the semiconductor lead layouts.

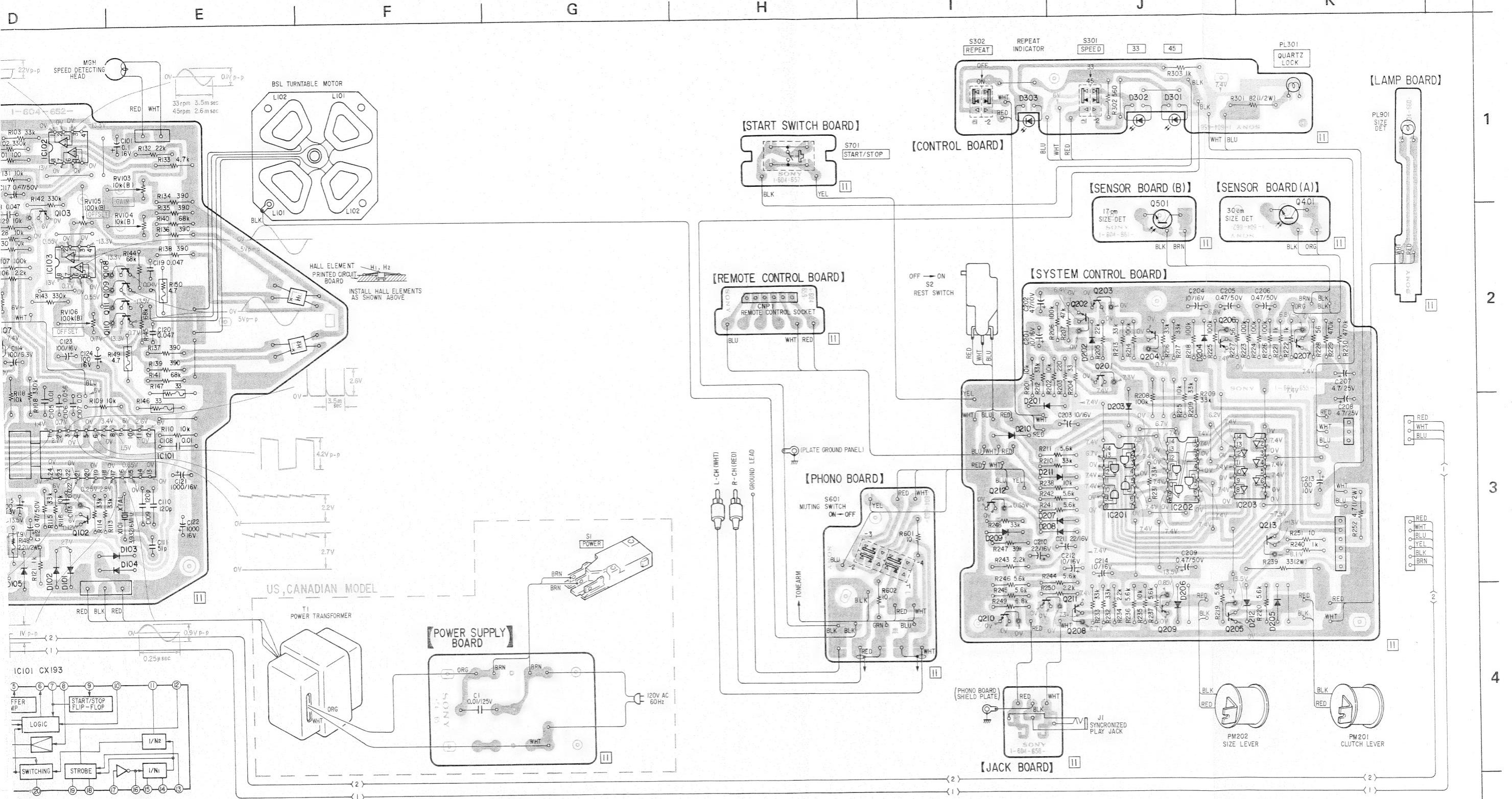


**Note:**

- Color code of sleaving over the end of the jacket.



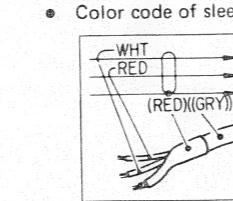
④ : B + pattern



103	IC102	108
IC103		109
102		111
101		110

105	102,101	103
		104



: B + pattern

212	210	203	201	204	501	206	205	401	207	Q
210	303	202	203	302	301	204	206	212	205	IC

210	303	201,211	207,208	202	203	204	301	204	206	D
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## 4-2. SCHEMATIC DIAGRAM

A

B

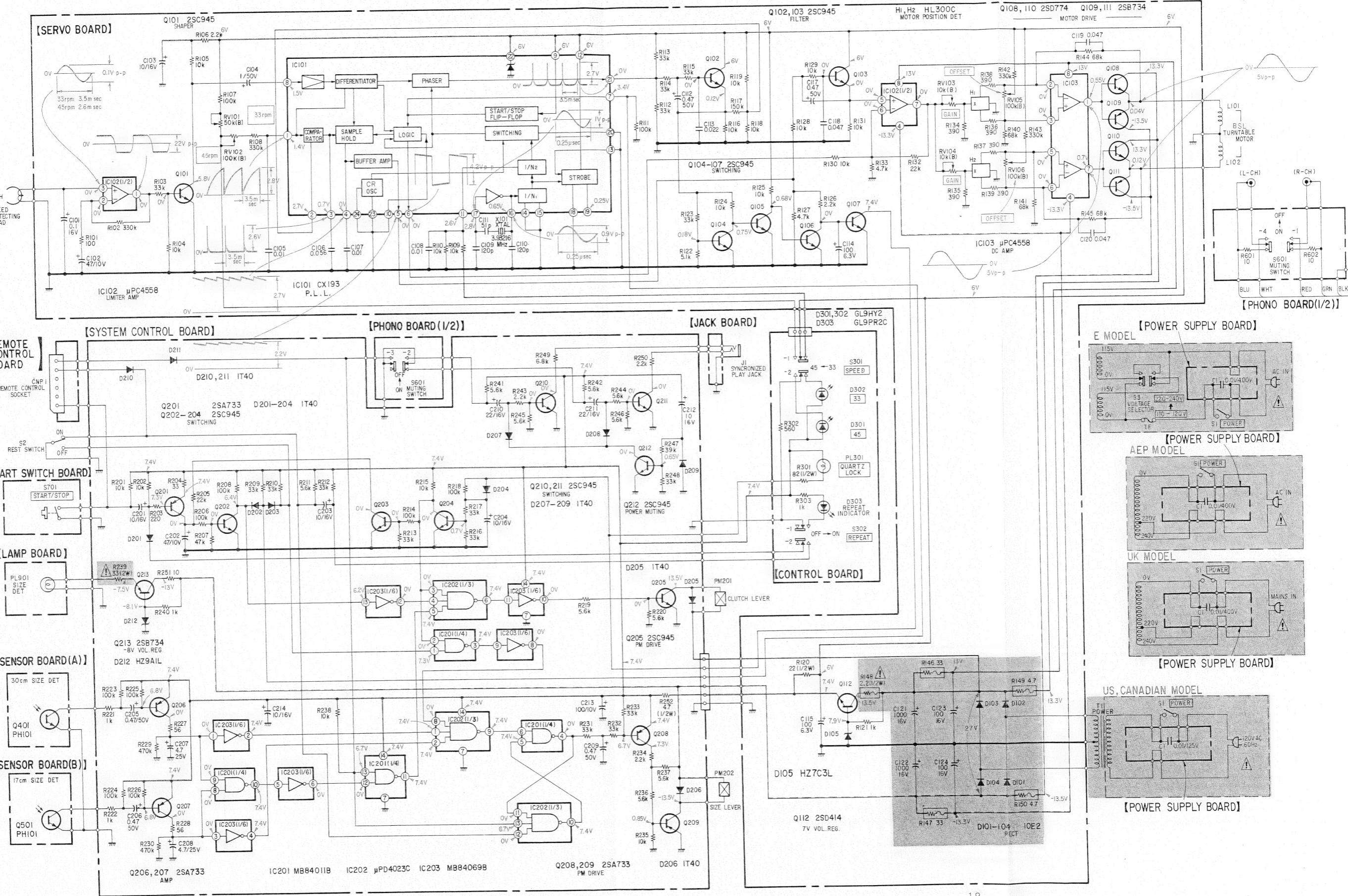
C

D

E

F

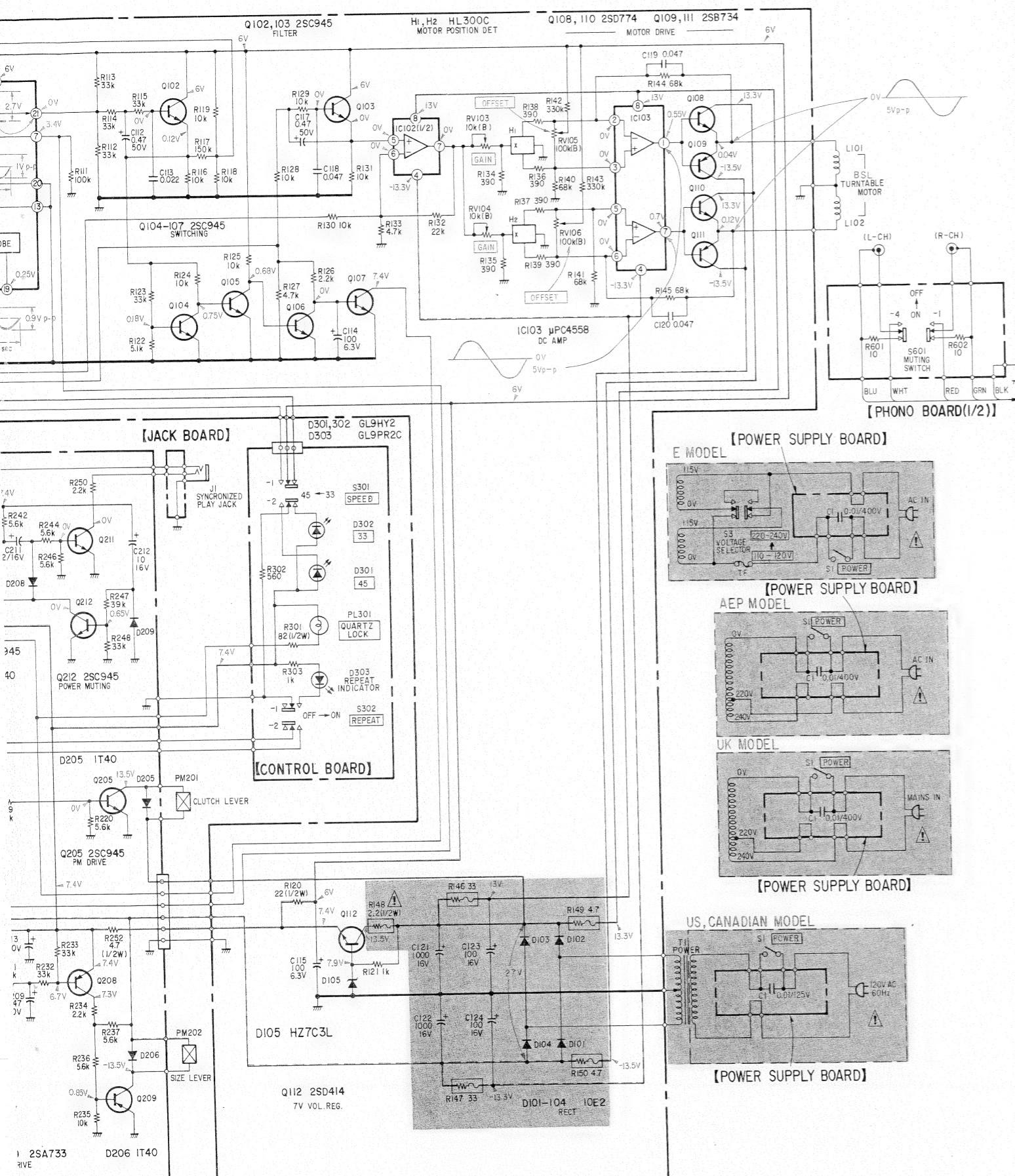
G



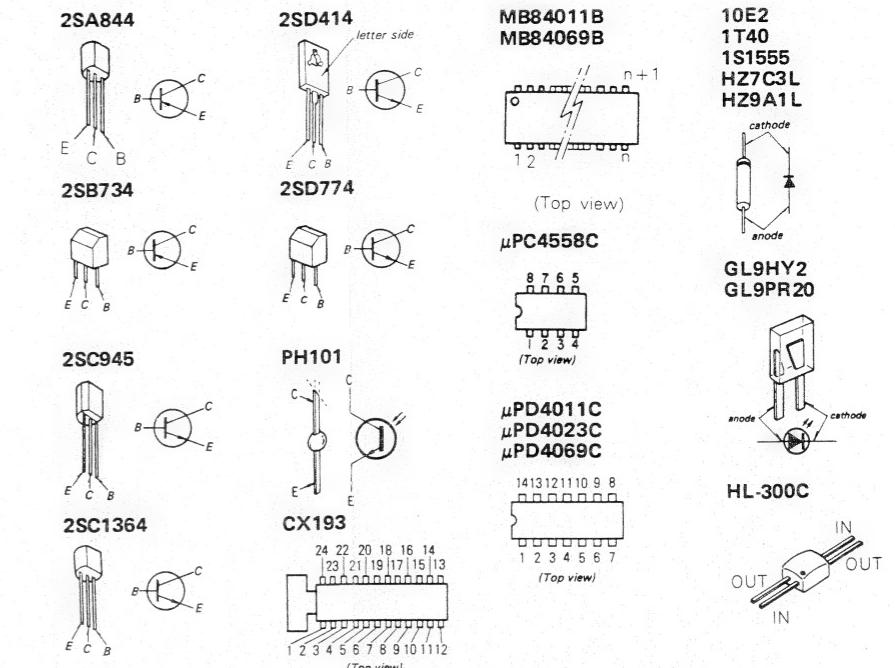
E

F

G



## Semiconductor Lead Layouts



## Note:

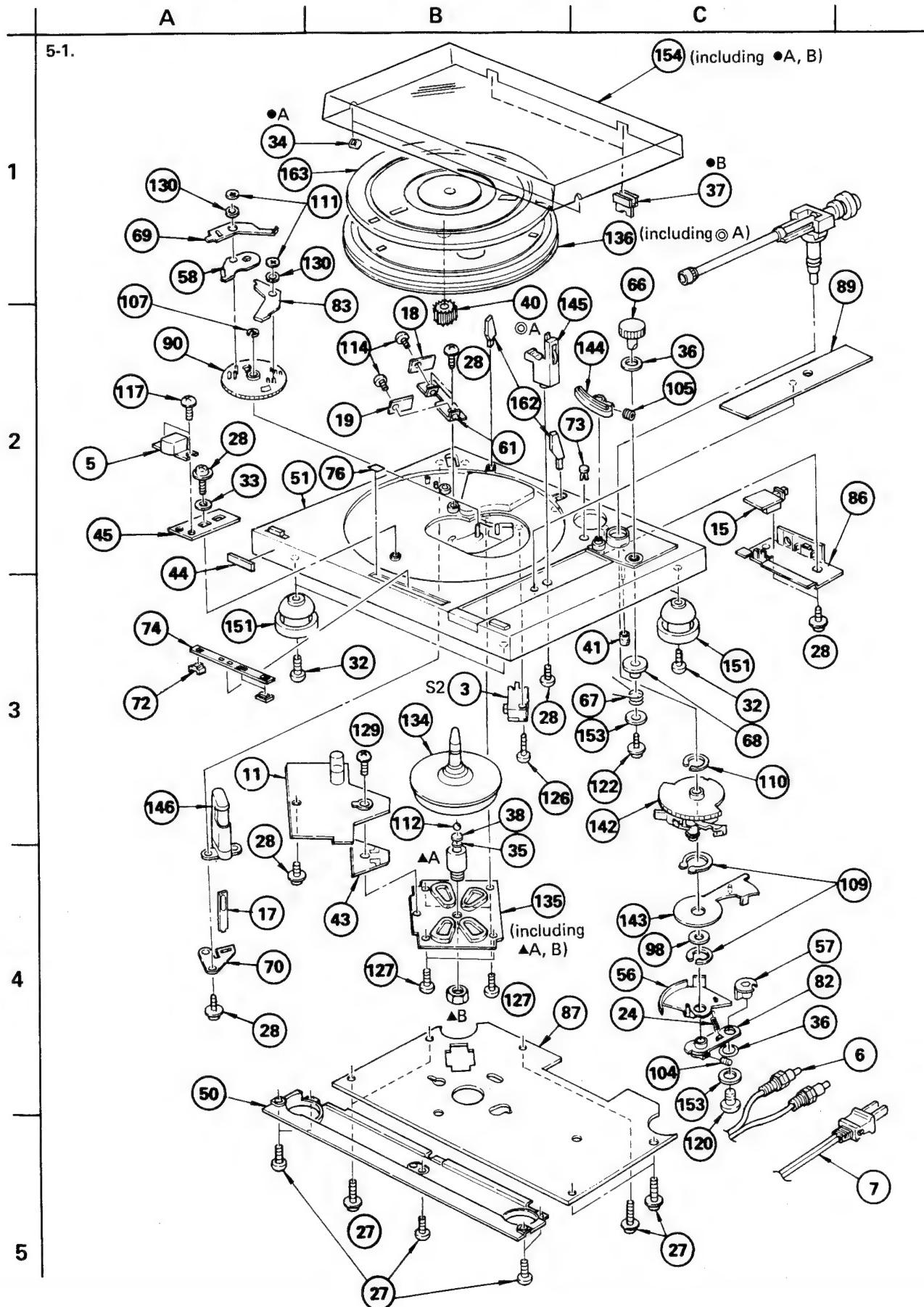
- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF}$  :  $\mu\mu\text{F}$  50WV or less are not indicated except for electrolytics and tantalums.
- $\text{---}$  : fusible resistor.
- $\text{---}$  : B+ bus.
- $\text{---}$  : B- bus.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a VOM (20 k $\Omega$ /V).
- Voltage variations may be noted due to normal production tolerances.
- Switch

Ref. No.	Switch	Position
S1	POWER	OFF
S2	rest	rest
S301	SPEED	33 rpm
S302	REPEAT	OFF
S601	muting	ON
S701	START/STOP	OFF

Note: The components identified by shading and mark  $\triangle$  are critical for safety. Replace only with part number specified.

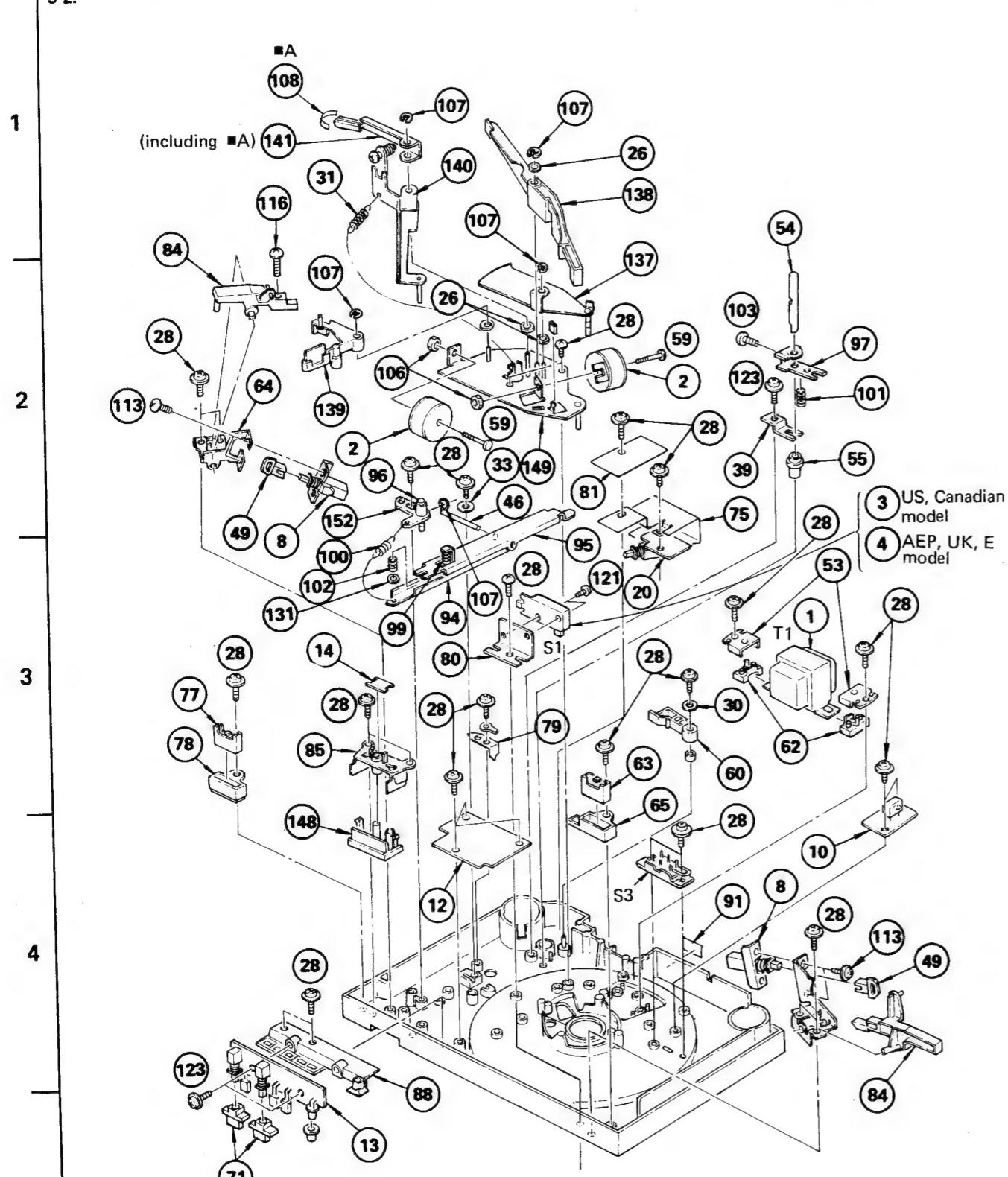
Note: Les composants identifiés par une trame et une marque  $\triangle$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

**SECTION 5**



A | B | C

5-2.



A | B | C

5-3.

1

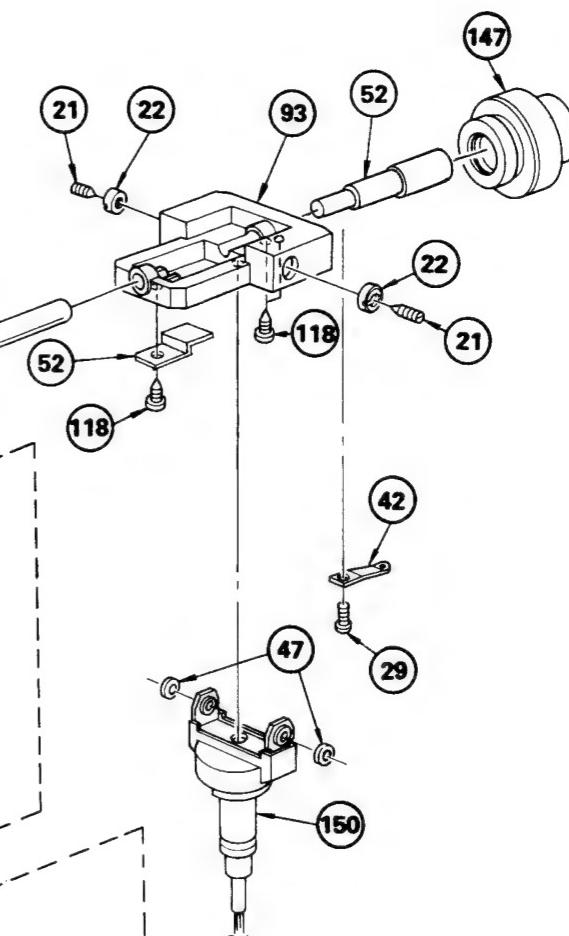
2

3

4

5

(AEP, UK, E model)

PS-LX5C US model:  
with cartridge 165  
PS-LX5 US, Canadian, E model:  
without cartridge 165132 (including □ A, B)  
133 □ A  
23 □ B  
165 (including ▲ A, B)  
166  
167  
164  
161  
169 ▲ A  
170 ▲ B  
168

GENERAL SECTION

No.	Part No.	Description
1	Δ;1-446-967-00	(E)...TRANSFORMER, POWER (T1)
1	Δ;1-446-966-00	(AEP,UK)...TRANSFORMER, POWER (T1)
1	Δ;1-446-965-00	(US,Canadian)...TRANSFORMER, POWER (T1)
2	1-454-196-31	SOLENOID
3	Δ;1-516-657-00	SWITCH,MICRO
4	Δ;1-516-889-00	SWITCH,MICRO
5	1-543-093-00	HEAD
6	1-551-294-00	CORD
7	Δ;1-551-628-00	(US,Canadian)...CORD, POWER
7	Δ;1-551-962-00	(AEP,UK)...CORD, POWER
7	Δ;1-551-967-00	(E)...CORD, POWER
8	1-553-444-00	SWITCH, PUSH (1 KEY)
9	1-561-551-00	CONNECTOR, NECK CYLINDER (M)
10	Δ;1-604-651-00	PC BOARD, POWER
11	Δ;A-4619-165-A	MOUNTED PCB, SERVO
12	Δ;A-4644-075-A	MOUNTED PCB, SYSTEM CONTROL
13	Δ;1-604-656-00	PC BOARD, CONTROL
14	Δ;1-604-657-00	PC BOARD, START SW
15	Δ;1-604-658-00	PC BOARD, JACK
16	Δ;1-604-659-00	PC BOARD, REMOTE CONTROL
17	Δ;1-604-660-00	PC BOARD, LAMP
18	Δ;1-604-661-00	PC BOARD, SENSOR (A)
19	Δ;1-604-662-00	PC BOARD, SENSOR (B)
20	Δ;1-604-663-00	PC BOARD, PHONO
21	2-203-518-00	SCREW
22	4-874-272-00	NUT (L), LOOK
23	2-330-163-00	(AEP,UK,E)...COVER, STYLUS
24	3-548-124-00	SPRING, TENSION
25	.....	
26	3-701-441-21	WASHER
27	3-703-136-00	SCREW, TAPPING
28	3-703-137-00	SCREW, TAPPING
29	3-703-454-00	SCREW, TAPPING
30	4-301-647-00	WASHER, SPECIAL
31	4-876-346-00	SPRING, TENSION (RESET)
32	4-314-529-00	HEAD, WASHER, TAPPING SCREW
33	4-812-554-00	WASHER
34	4-876-304-00	(LX5-US,Canadian,AEP,UK,E) ...CUSHION,DUSTCOVER
35	4-852-008-00	RETAINER (B), THRUST
36	4-844-041-11	WASHER, (N)
37	4-852-704-41	(LX5-US,Canadian,AEP,UK,E)...HINGE
38	4-852-007-00	RETAINER (A), THRUST
39	Δ;4-852-033-00	RETAINER, CASE, PUSH ROD
40	4-852-061-00	GEAR, CENTER
41	4-852-841-00	TUBE
42	4-853-043-00	SPRING (B), GUIDE
43	4-857-642-00	HOLDER, PC BOARD
44	4-857-661-11	EMBLEM, SONY
45	Δ;4-858-266-00	BRACKET, HEAD

## NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- Items marked "Δ" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers (Δ-ΔΔΔ-ΔΔΔ-XX or Δ-ΔΔΔΔ-ΔΔΔ-X) may be different from those used in the set.

## CAPACITORS:

- All capacitors are in  $\mu\text{F}$ . Common capacitors are omitted. Refer to the following lists for their part numbers.  
MF: $\mu\text{F}$ , PF: $\mu\mu\text{F}$ .

## RESISTORS

- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.

- F : nonflammable

## COILS

- MMH : mH, UH :  $\mu\text{H}$

GENERAL SECTION

No.	Part No.	Description
46	●;4-861-940-00	SHAFT, LIFTER LEVER
47	4-863-604-00	BEARING, PIVOT
48	4-874-246-00	RETAINER, PLATE, UP AND DOWN
49	4-870-757-00	CONNECTOR
50	4-874-205-01	PLATE (A), BOTTOM
51	●;4-874-207-00	FRAME
52	4-874-244-00	BAR, WEIGHT
53	●;4-874-210-00	HOLDER, TRANSFORMER
54	4-874-217-00	ROD, PUSH
55	●;4-874-218-00	CASE, PUSH ROD
56	4-874-223-02	LEVER (A), ARM
57	4-874-231-00	CAM, ECCENTRIC
58	4-874-232-00	CLUTCH (R)
59	4-874-234-00	CORE
60	●;4-874-235-00	LEVER, MUTING
61	●;4-874-236-00	HOLDER, SENSOR
62	4-874-237-00	DAMPER, TRANSFORMER
63	4-874-238-00	KNOB, POWER
64	●;4-874-239-00	HOLDER, LOCK MECHANISM
65	4-874-241-01	ESCUCHEON, POWER
66	4-874-247-00	KNOB, IFC
67	4-874-250-00	SPRING
68	4-874-252-00	CAM, IFC
69	4-874-254-00	CLUTCH (S)
70	●;4-874-255-00	BRACKET, CHASSIS
71	4-874-257-11	KNOB (A)
72	4-874-258-01	PLATE, INDICATION
73	4-874-260-01	CAP, BLIND
74	4-874-261-01	PANEL (D), INDICATION
75	●;4-874-263-00	PLATE (A), SHIELD
76	4-874-265-11	FILTER
77	4-874-267-01	KNOB, LIFTER
78	4-874-269-11	ESCUCHEON, LIFTER
79	●;4-874-273-00	PLATE, GROUND, PANEL
80	4-874-274-00	HOLDER, SWITCH, MICRO
81	●;4-874-276-00	PLATE (B), SHIELD
82	4-874-277-03	LEVER (B), ARM
83	4-874-279-00	CLUTCH (L)
84	4-874-280-00	LEVER (B), SEESAW
85	4-874-281-01	ESCUCHEON, START
86	4-874-285-01	BOARD, TERMINAL,REMOTE CONTROL
87	●;4-874-286-00	BOARD (B), BOTTOM
88	4-874-288-01	ESCUCHEON
89	4-874-290-01	PANEL
90	4-874-292-00	GEAR (F), DRIVE

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

# S-LX5/LX5C

## GENERAL SECTION

No.	Part No.	Description
91	4-876-327-00	(US, Canadian)...LABEL, MODEL NUMBER
91	4-876-303-00	(AEP).....LABEL, MODEL NUMBER
91	4-876-329-00	(UK).....LABEL, MODEL NUMBER
91	4-876-331-00	(E).....LABEL, MODEL NUMBER
92	4-874-243-00	PIPE, ARM
93	4-874-291-00	JOINT (D), PIPE
94	4-876-314-00	LEVER (C), SEESAW
95	4-876-315-00	LEVER (D), SEESAW
96	4-876-316-00	ROD, DAMPER
97	4-876-317-00	GUIDE, LIFTER
98	4-876-324-21	POLY-SLIDER (DIA.9.5)
99	4-876-338-00	SPRING, TENSION (UP)
.00	4-876-339-00	SPRING, TENSION (DOWN)
.01	4-876-340-00	SPRING, COMPRESSION
.02	4-876-375-00	SPRING, COMPRESSION
.03	7-621-259-45	SCREW +P 2.6X6
.04	3-701-509-00	SET SCREW, DOUBLECUP 3X8
.05	7-621-738-08	SET-SCT, HEX. 2.6X4,FLAT POINT
.06	7-622-207-05	N 2.6, TYPE 2
.07	7-624-106-04	STOP RING 3.0, TYPE -E
.08	4-874-275-00	PAD, BRAKE
.09	7-624-133-44	STOP RING 9, TYPE-CE
.10	7-624-133-54	STOP RING 10, TYPE-CE
.11	7-624-190-81	STOP RING 2, TYPE-CS
.12	7-671-114-01	BALL 4, STEEL
.13	7-682-146-01	SCREW +P 3X5
.14	7-682-546-04	SCREW +B 3X5
.15	.....	
.16	7-682-553-04	SCREW +B 3X20
.17	7-685-102-21	SCREW +P 2X4 TYPE2 SLIT
.18	7-685-104-64	SCREW +P 2X6 TYPE2 SLIT
.19	.....	
.20	7-685-145-21	SCREW +P 3X6 TYPE2 SLIT
.21	7-685-150-21	SCREW +P 3X16 TYPE2 SLIT
.22	7-685-152-21	SCREW +P 3X25 TYPE2 SLIT
.23	7-685-646-21	SCREW +BVTP 3X8 TYPE2 SLIT
.24	.....	
.25	.....	
.26	7-685-651-21	SCREW +BVTP 3X20 TYPE1
.27	7-685-661-21	SCREW +BVTP 4X12 TYPE2 SLIT
.28	7-685-772-04	SCREW +PTT 1.7X2 TYPE1
.29	7-685-872-01	SCREW +BVTT 3X8 (S)
.30	7-623-105-15	W 2, MIDDLE
.31	7-688-004-11	W 4, MIDDLE
.32	A-4505-068-A	(AEP,UK,E)..CARTRIDGE COMPLETE ASSY, XL-200
.33	A-4587-061-A	(AEP,UK,E)..STYLUS ASSY, ND-200G
.34	A-4608-175-A	ROTOR ASSY
.35	A-4608-176-A	STATOR ASSY

## GENERAL SECTION

No.	Part No.	Description
136	X-4874-218-0	TURNTABLE ASSY
137	▲;X-4874-202-0	LEVER ASSY, MAIN
138	X-4874-203-0	LEVER ASSY, CLUTCH
139	▲;X-4874-204-0	LEVER ASSY, SIZE
140	▲;X-4874-205-0	LEVER ASSY, RESET
141	▲;X-4874-206-0	LEVER ASSY, BRAKE
142	X-4874-208-0	LEVER (A) ASSY, INDEX
143	▲;X-4874-209-0	LEVER (B) ASSY, INDEX
144	X-4874-211-0	PLATE ASSY, UP AND DOWN
145	X-4874-212-1	REST ASSY, ARM
146	X-4874-213-0	HOUSE ASSY, LIGHT
147	X-4874-214-0	WEIGHT ASSY, MAIN
148	X-4874-215-1	KNOB ASSY, START
149	▲;X-4874-217-0	CHASSIS ASSY
150	X-4874-219-0	JOINT ASSY, CENTER
151	X-4874-224-0	INSULATOR ASSY
152	X-4874-225-0	CASE ASSY, DAMPER
153	0-056-028-00	WASHER, 14
154	X-4874-220-0	(LX5-US,Canadian,AEP,UK,E) ...COVER ASSY, DUST

### NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- Items marked "▲" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers (Δ-ΔΔΔ-ΔΔΔ-XX or Δ-ΔΔΔΔ-ΔΔΔ-X) may be different from those used in the set.

### CAPACITORS:

- All capacitors are in  $\mu$ F. Common capacitors are omitted. Refer to the following lists for their part numbers.  
MF: $\mu$ F, PF: $\mu\mu$ F.

### RESISTORS

- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.

### • F : nonflammable

### COILS

- MMH : mH, UH :  $\mu$ H

ACCESSORY & PACKING MATERIAL

No.	Part No.	Description
161	1-555-463-00	(US,Canadian,E).....CONNECTOR, WITH LEAD
	3-701-613-00	BAG, POLYETHYLENE
	3-701-616-00	BAG, POLYETHYLENE
	3-701-630-00	BAG, POLYETHYLENE
	3-701-806-00	(E).....ADAPTOR, 45
	3-783-559-11	(AEP,UK,E).....MANUAL, INSTRUCTION
	3-783-559-21	(US,Canadian).....MANUAL, INSTRUCTION
	3-794-123-11	LABEL, CAUTION
	3-795-153-51	(E).....INSTRUCTION, HEAD SHELL
	4-862-043-00	CUSHION, ARM
	4-862-680-00	PROTECTOR
	4-870-529-00	(E) ..... SHELL CASE
162	4-874-262-00	GUIDE, RECORD
163	4-874-202-01	(Canadian,AEP,UK,E)...SHEET, TURNTABLE
163	4-874-202-11	(US).....SHEET, TURNTABLE
	4-876-310-00	CUSHION, TURNTABLE
	4-876-320-00	SPACER, CLUTCH
	4-876-348-00	(AEP,UK,E)..GUIDE, STYLUS PRESSURE SETTING
	4-876-350-00	HOLDER, TABLE
	4-876-352-00	SHEET, PROTECTION
	4-876-355-00	INDIVIDUAL CARTON
	4-876-356-00	CUSHION, LEFT
	4-876-357-00	CUSHION, RIGHT
164	X-4869-912-3	(US,Canadian).....SHELL ASSY, HEAD
164	X-4874-226-0	(E).....SHELL ASSY, HEAD
	X-4869-915-0	(LX5-US,Canadian,E)
		.....SCREW ASSY, CARTRIDGE FITTING
	X-4874-227-0	(LX5-US,Canadian,AEP,UK,E).WEIGHT ASSY, SUB
165	1-549-105-00	(LX5C-US)...CARTRIDGE COMPLETE ASSY, VL-5
166	2-056-532-00	(LX5C-US)...SCREW, CARTRIDGE FITTING
167	2-229-507-00	(LX5C-US)...WASHER, CARTRIDGE FITTING
168	4-815-655-01	(LX5C-US)...NUT (A), CARTRIDGE FITTING
169	A-4587-058-A	(LX5C-US)...STYLUS, (ND-5G)
170	2-231-164-00	(LX5C-US)...COVER, STYLUS

ELECTRICAL PARTS

Ref.No.	Part No.	Description
	C1 A 1-161-744-00	(AEP,UK,E)....CAP,CERAMIC 0.01MF 400V
	C1 A 1-161-749-00	(US,Canadian)....CAP,CERAMIC 0.01MF 125V
	C121, I22 A 1-123-324-00	1000MF 16V
	C123, I24 A 1-123-330-00	100MF 16V
	CNP1 ♦ ;1-508-994-00	PIN, CONNECTOR
	D101 A 8-719-200-02	DIODE 10E-2
	D102 A 8-719-200-02	DIODE 10E-2
	D103 A 8-719-200-02	DIODE 10E-2
	D104 A 8-719-200-02	DIODE 10E-2
	D105 8-719-910-79	DIODE HZ7C3L
	D201 8-719-815-55	DIODE 1S1555
	D202 8-719-815-55	DIODE 1S1555
	D203 8-719-815-55	DIODE 1S1555
	D204 8-719-815-55	DIODE 1S1555
	D205 8-719-815-55	DIODE 1S1555
	D206 8-719-815-55	DIODE 1S1555
	D207 8-719-815-55	DIODE 1S1555
	D208 8-719-815-55	DIODE 1S1555
	D209 8-719-815-55	DIODE 1S1555
	D210 8-719-815-55	DIODE 1S1555
	D211 8-719-815-55	DIODE 1S1555
	D212 8-719-990-91	DIODE HZ9A1L
	D301 8-719-904-92	DIODE GL-9HY2
	D302 8-719-904-92	DIODE GL-9HY2
	D303 8-719-900-92	DIODE GL-9PR20
	IC101 8-751-930-00	IC CX-193
	IC102 8-759-145-58	IC UPC4558C
	IC103 8-759-145-58	IC UPC4558C
	IC201 8-759-240-11	IC UPD4069C
	IC202 8-759-140-23	IC UPD4023C
	IC203 8-759-140-69	IC UPD4069C
	H1 8-719-903-00	DIODE HL-300C
	H2 8-719-903-00	DIODE HL-300C
	J1 1-507-688-21	JACK (STEREO PLUG)
	PL301 1-518-322-21	LAMP, PILOT
	PL901 1-518-305-00	LAMP, PILOT
	Q101 8-729-663-47	TRANSISTOR 2SC1364
	Q102 8-729-663-47	TRANSISTOR 2SC1364
	Q103 8-729-663-47	TRANSISTOR 2SC1364
	Q104 8-729-663-47	TRANSISTOR 2SC1364
	Q105 8-729-663-47	TRANSISTOR 2SC1364
	Q106 8-729-663-47	TRANSISTOR 2SC1364
	Q107 8-729-663-47	TRANSISTOR 2SC1364
	Q108 8-729-177-43	TRANSISTOR 2SD774
	Q109 8-729-103-43	TRANSISTOR 2SB734
	Q110 8-729-177-43	TRANSISTOR 2SD774

## NOTE:

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- Items marked "♦" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers ( $\Delta-\Delta\Delta-\Delta\Delta-\Delta\Delta-X$  or  $\Delta-\Delta\Delta\Delta-\Delta\Delta\Delta-X$ ) may be different from those used in the set.

## CAPACITORS:

- All capacitors are in  $\mu F$ . Common capacitors are omitted. Refer to the following lists for their part numbers.  
MF: $\mu F$ , PF: $\mu\mu F$ .

## RESISTORS

- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.

• F : nonflammable

## COILS

• MMH : mH, UH :  $\mu H$ 

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

# S-LX5/LX5C

## ELECTRICAL PARTS

Ref.No.	Part No.	Description				
Q111	8-729-103-43	TRANSISTOR 2SR734				
Q112	8-729-141-43	TRANSISTOR 2SD414				
Q201	8-729-384-47	TRANSISTOR 2SA844				
Q202	8-729-663-47	TRANSISTOR 2SC1364				
Q203	8-729-663-47	TRANSISTOR 2SC1364				
Q204	8-729-663-47	TRANSISTOR 2SC1364				
Q205	8-729-663-47	TRANSISTOR 2SC1364				
Q206	8-729-384-47	TRANSISTOR 2SA844				
Q207	8-729-384-47	TRANSISTOR 2SA844				
Q208	8-729-384-47	TRANSISTOR 2SA844				
Q209	8-729-384-47	TRANSISTOR 2SA844				
Q210	8-729-663-47	TRANSISTOR 2SC1364				
Q211	8-729-663-47	TRANSISTOR 2SC1364				
Q212	8-729-663-47	TRANSISTOR 2SC1364				
Q213	8-729-103-43	TRANSISTOR 2SB734				
Q401	8-729-101-01	TRANSISTOR PH101				
Q501	8-729-101-01	TRANSISTOR PH101				
R146	▲ 1-212-869-00	FUSIBLE	33	5%	1/4W	F
R147	▲ 1-212-869-00	FUSIBLE	33	5%	1/4W	F
R148	▲ 1-212-942-00	FUSIBLE	2.2	5%	1/2W	F
R149	▲ 1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R150	▲ 1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R239	▲ 1-206-475-00	METAL	33	5%	2W	F
RV101	1-228-222-00	RES, ADJ, METAL GLAZE 50K				
RV102	1-228-223-00	RES, ADJ, METAL GLAZE 100K				
RV103	1-226-236-00	RES, ADJ, CARBON 10K				
RV104	1-226-236-00	RES, ADJ, CARBON 10K				
RV105	1-226-239-00	RES, ADJ, CARBON 100K				
RV106	1-226-239-00	RES, ADJ, CARBON 100K				
S3	▲ 1-552-535-00	(E).....SWITCH, VOLTAGE CHANGE				
S301	1-553-331-21	SWITCH, PUSH				
S302	1-553-331-21	SWITCH, PUSH				
S601	1-553-693-00	SWITCH, PUSH				
S701	1-553-580-00	SWITCH, KEY BOARD				
X101	1-527-380-00	CRYSTAL, OSC				
	1-526-565-00	(Supplied only with E model for EURO-PLUG) .....AC PLUG ADAPTOR				

### NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- Items marked "▲" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers ( $\Delta-\Delta\Delta-\Delta\Delta-\text{XX}$  or  $\Delta-\Delta\Delta\Delta-\Delta\Delta-\text{X}$ ) may be different from those used in the set.

### CAPACITORS:

- All capacitors are in  $\mu\text{F}$ . Common capacitors are omitted. Refer to the following lists for their part numbers.  
MF: $\mu\text{F}$ , PF: $\mu\mu\text{F}$ .

### RESISTORS:

- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.

• F : nonflammable

### COILS

• MMH : mH, UH :  $\mu\text{H}$

The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque ▲ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

# PS-LX5/LX5C PS-LX5/LX5C

## ELECTROLYTIC CAPACITORS

CAP. ( $\mu$ F)	RATING					
	6.3 VOLT.	10 VOLT.	16 VOLT.	25 VOLT.	35 VOLT.	50 VOLT.
	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.
0.47					→	1-121-726-00
1.0					→	1-121-391-00
2.2	→	→	→	→	→	1-121-450-00
3.3	→	→	→	→	→	1-121-393-00
4.7	→	→	→	→	→	1-121-396-00
10	→	→	1-121-651-00	1-121-398-00	→	1-121-738-00
22	→	→	1-121-479-00	1-121-480-00	1-121-662-00	1-121-152-00
33	→	→	1-121-403-00	1-121-404-00	1-121-652-00	1-121-405-00
47	→	• 1-121-352-00	1-121-410-00	1-121-410-00	1-121-653-00	1-121-411-00
100	→	1-121-414-00	1-121-415-00	1-121-416-00	1-121-357-00	1-121-417-00
220	1-121-419-00	1-121-420-00	1-121-421-00	1-121-422-00	1-121-261-00	1-121-423-00
330	1-121-751-00	1-121-805-00	1-121-521-00	1-121-654-00	1-121-655-00	1-121-656-00
470	1-121-424-00	1-121-425-00	1-121-426-00	1-121-733-00	1-121-361-00	1-121-810-00
1000	—	1-121-736-00	1-121-245-00	1-121-657-00	1-121-388-00	1-123-061-00
2200	1-121-658-00	1-121-659-00	1-121-660-00	1-123-067-00	1-121-984-00	—
3300	1-121-661-00	1-123-075-00	1-123-071-00	—	—	—

→ : Use the high voltage rated one.

CAP. ( $\mu$ F)	RATING			
	100 VOLT.	160 VOLT.	250 VOLT.	350 VOLT.
	PART No.	PART No.	PART No.	PART No.
0.47	—	—	—	—
1.0	1-123-249-00	1-123-252-00	1-123-003-00	1-121-168-00
2.2	1-123-250-00	1-123-026-00	—	1-123-028-00
3.3	1-121-995-00	—	1-123-004-00	1-123-006-00
4.7	1-123-255-00	1-121-246-00	1-121-759-00	1-123-007-00
10	1-121-126-00	1-121-999-00	1-123-254-00	1-123-008-00
22	1-121-996-00	1-123-253-00	1-123-005-00	1-123-022-00
33	1-121-997-00	1-121-757-00	—	—
47	1-123-251-00	1-121-919-00	—	—
100	1-123-084-00	—	—	—

## CERAMIC CAPACITORS

CAP. (pF)	RATING					
	50 VOLT.	CAP. (pF)	50 VOLT.	CAP. (pF)	50 VOLT.	CAP. (pF)
	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.
0.5	1-101-837-00	22	1-102-959-00	150	1-101-361-00	0.001
0.75	1-101-586-00	24	1-102-960-00	160	1-101-367-00	0.0012
1.0	1-102-934-00	27	1-102-961-00	180	1-102-976-00	0.0015
1.5	1-101-576-00	30	1-102-962-00	200	1-102-977-00	0.0018
2.0	1-102-935-00	33	1-102-963-00	220	1-102-978-00	0.0022
3	1-102-936-00	36	1-102-964-00	240	1-102-979-00	0.0027
4	1-102-937-00	39	1-102-965-00	270	1-102-980-00	0.0033
5	1-102-942-00	43	1-102-966-00	300	1-102-981-00	0.0039
6	1-102-943-00	47	1-101-880-00	330	1-102-820-00	0.0047
7	1-102-944-00	51	1-101-882-00	360	1-102-821-00	0.0056
8	1-102-945-00	56	1-101-884-00	390	1-102-822-00	0.0068
9	1-102-946-00	62	1-101-886-00	430	1-102-823-00	0.0082
10	1-102-947-00	68	1-101-888-00	470	1-102-824-00	0.01
11	1-102-948-00	75	1-101-890-00	510	1-101-059-00	0.022
12	1-102-949-00	82	1-102-971-00	560	1-102-115-00	0.047
13	1-102-950-00	91	1-102-972-00	680	1-102-116-00	
15	1-102-951-00	100	1-102-973-00	820	1-102-117-00	
16	1-102-952-00	110	1-102-815-00			
18	1-102-953-00	120	1-102-816-00			
20	1-102-958-00	130	1-101-081-00			

0.001 $\mu$ F = 1,000pF

## CERAMIC (SEMICONDUCTOR) CAPACITORS

CAP. ( $\mu$ F)	RATING					
	25 VOLT.	50 VOLT.	CAP. ( $\mu$ F)	25 VOLT.	50 VOLT.	
	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.
0.001	→	1-161-039-00	0.018	1-161-016-00	1-161-054-00	
0.0012	→	1-161-040-00	0.022	1-161-017-00	1-161-055-00	
0.0015		1-161-041-00	0.027	1-161-018-00	1-161-056-00	
0.0018		1-161-042-00	0.033	1-161-019-00	1-161-057-00	
0.0022		1-161-043-00	0.039	1-161-010-00	1-161-058-00	
0.0027	→	1-161-044-00	0.047	1-161-021-00	1-161-059-00	
0.0033	→	1-161-045-00	0.056	→	1-161-060-00	
0.0039	→	1-161-046-00	0.068	→	1-161-061-00	
0.0047	→	1-161-047-00	0.082	1-161-024-00	1-161-062-00	
0.0056	→	1-161-048-00	0.1	1-161-025-00	1-161-063-00	
0.0068	→	1-161-049-00				
0.0082	1-161-012-00	1-161-050-00				
0.01	1-161-013-00	1-161-051-00				
0.012	→	1-161-052-00				
0.015	1-161-015-00	1-161-053-00				

→ : Use the high voltage rated one.

## MYLAR CAPACITORS

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# PS-LX5/LX5C PS-LX5/LX5C

## 1/16 WATT CARBON RESISTOR

$\Omega$	Part No.	$\Omega$	Part No.	$\Omega$	Part No.	$\Omega$	Part No.	$\Omega$	Part No.	$\Omega$	Part No.
2.0	—	13	—	91	1-210-354-00	620	1-210-367-00	4.3k	1-209-772-00	30k	1-210-380-00
2.2	—	15	—	100	1-210-355-00	680	1-210-106-00	4.7k	1-209-773-00	33k	1-210-381-00
2.4	—	16	—	110	1-210-356-00	750	1-210-107-00	5.1k	1-209-774-00	36k	1-210-394-00
2.7	—	18	1-211-688-00	120	1-210-357-00	820	1-210-108-00	5.6k	1-209-775-00	39k	1-210-382-00
3.0	—	20	—	130	1-210-358-00	910	1-210-368-00	6.2k	1-209-776-00	43k	1-210-383-00
3.3	—	22	—	150	1-210-102-00	1.0k	1-204-122-00	6.8k	1-209-777-00	47k	1-210-384-00
3.6	—	24	—	160	1-210-359-00	1.1k	1-210-369-00	7.5k	1-209-778-00	51k	1-210-385-00
3.9	—	27	—	180	1-210-360-00	1.2k	1-209-765-00	8.2k	1-209-779-00	56k	1-210-386-00
4.3	—	30	1-210-845-00	200	1-210-361-00	1.3k	1-210-370-00	9.1k	1-209-780-00	62k	1-210-387-00
4.7	—	33	1-210-846-00	220	1-210-362-00	1.5k	1-209-766-00	10k	1-209-781-00	68k	1-210-388-00
5.1	—	36	1-210-847-00	240	1-209-762-00	1.6k	1-210-371-00	11k	1-210-374-00	75k	1-210-389-00
5.6	—	39	1-210-848-00	270	1-210-363-00	1.8k	1-209-878-00	12k	1-210-111-00	82k	1-210-390-00
6.2	—	43	1-210-849-00	300	1-210-364-00	2.0k	1-209-767-00	13k	1-210-375-00	91k	1-210-391-00
6.8	—	47	1-210-395-00	330	1-209-763-00	2.2k	1-209-768-00	15k	1-210-112-00	100k	1-210-115-00
7.5	—	51	1-210-101-00	360	1-210-103-00	2.4k	1-209-769-00	16k	1-210-376-00	110k	—
8.2	—	56	1-210-351-00	390	1-210-365-00	2.7k	1-209-770-00	18k	1-210-113-00	120k	1-210-836-00
9.1	—	62	1-210-352-00	430	1-210-366-00	3.0k	1-210-372-00	20k	1-210-377-00	130k	—
10	—	68	1-210-353-00	470	1-209-764-00	3.3k	1-204-123-00	22k	1-210-114-00	150k	1-210-837-00
11	—	75	1-210-392-00	510	1-210-104-00	3.6k	1-210-373-00	24k	1-210-378-00	160k	—
12	—	82	1-210-393-00	560	1-210-105-00	3.9k	1-209-771-00	27k	1-210-379-00	180k	1-210-838-00

## 1/8 WATT CARBON RESISTOR

$\Omega$	Part No.										
2.0	—	13	1-246-821-00	91	1-246-831-00	620	1-246-841-00	4.3k	1-246-851-00	30k	1-246-861-00
2.2	1-246-751-00	15	1-246-761-00	100	1-246-771-00	680	1-246-781-00	4.7k	1-246-791-00	33k	1-246-801-00
2.4	—	16	1-246-822-00	110	1-246-832-00	750	1-246-842-00	5.1k	1-246-852-00	36k	1-246-862-00
2.7	1-246-752-00	18	1-246-762-00	120	1-246-772-00	820	1-246-782-00	5.6k	1-246-792-00	39k	1-246-802-00
3.0	—	20	1-246-823-00	130	1-246-833-33	910	1-246-843-00	6.2k	1-246-853-00	43k	1-246-863-00
3.3	1-246-753-00	22	1-246-763-00	150	1-246-773-00	1.0k	1-246-783-00	6.8k	1-246-793-00	47k	1-246-803-00
3.6	—	24	1-246-824-00	160	1-246-834-00	1.1k	1-246-844-00	7.5k	1-246-854-00	51k	1-246-864-00
3.9	1-246-754-00	27	1-246-764-00	180	1-246-774-00	1.2k	1-246-784-00	8.2k	1-246-794-00	56k	1-246-804-00
4.3	—	30	1-246-825-00	200	1-246-835-00	1.3k	1-246-845-00	9.1k	1-246-855-00	62k	1-246-865-00
4.7	1-246-755-00	33	1-246-765-00	220	1-246-775-00	1.5k	1-246-785-00	10k	1-246-795-00	68k	1-246-805-00
5.1	—	36	1-246-826-00	240	1-246-836-00	1.6k	1-246-846-00	11k	1-246-856-00	75k	1-246-866-00
5.6	1-246-756-00	39	1-246-766-00	270	1-246-776-00	1.8k	1-246-786-00	12k	1-246-796-00	82k	1-246-806-00
6.2	—	43	1-246-827-00	300	1-246-837-00	2.0k	1-246-847-00	13k	1-246-857-00	91k	1-246-867-00
6.8	1-246-757-00	47	1-246-767-00	330	1-246-777-00	2.2k	1-246-787-00	15k	1-246-797-00	100k	1-246-807-00
7.5	1-246-818-00	51	1-246-828-00	360	1-246-838-00	2.4k	1-246-848-00	16k	1-246-858-00	110k	1-246-868-00
8.2	1-246-758-00	56	1-246-768-00	390	1-246-778-00	2.7k	1-246-788-00	18k	1-246-798-00	120k	1-246-808-00
9.1	1-246-819-00	62	1-246-829-00	430	1-246-839-00	3.0k	1-246-849-00	20k	1-246-859-00	130k	1-246-869-00
10	1-246-759-00	68	1-246-769-00	470	1-246-779-00	3.3k	1-246-789-00	22k	1-246-799-00	150k	1-246-809-00
11	1-246-820-00	75	1-246-830-00	510	1-246-840-00	3.6k	1-246-850-00	24k	1-246-860-00	160k	1-246-870-00
12	1-246-760-00	82	1-246-770-00	560	1-246-780-00	3.9k	1-246-790-00	27k	1-246-800-00	180k	1-246-810-00

## 1/4 WATT CARBON RESISTORS

$\Omega$	Part No.										
1.0	1-246-401-00	10	1-246-425-00	100	1-246-449-00	1.0k	1-246-473-00	10k	1-246-497-00	100k	1-246-521-00
1.1	1-246-402-00	11	1-246-426-00	110	1-246-450-00	1.1k	1-246-474-00	11k	1-246-498-00	110k	1-246-522-00
1.2	1-246-403-00	12	1-246-427-00	120	1-246-451-00	1.2k	1-246-475-00	12k	1-246-499-00	120k	1-246-523-